ABSTRACT

(From a Shorthand Report)

OF A

Post-graduate Lecture

ON

SOME POINTS IN PROGNOSIS AND TREATMENT IN CASES OF HEMIPLEGIA.

By H. CHARLTON BASTIAN, M.D., F.R.S.

In calling attention to the principal points of this important subject, Dr. Bastian thought the cases might be divided into three great groups. Taking them in the order of frequency, the first of these contained the cases of abrupt onset due to hæmorrhage, embolism, and thrombosis; the second included cases of abscess of the brain, hydatid cysts, and pachymeningitis or tumours (syphilitic or non-syphilitic), the paralysis here being of comparatively slow onset, with very often incomplete hemiplegia; and, lastly, those undoubtedly rare cases known as functional or hysterical paralysis, taking the form of hemiplegia.

These latter cases would only be briefly dealt with. In their diagnosis there were difficulties. It must be done, in the main, by excluding organic disease of the other types he had mentioned. Still, some characteristic features occurred in this form of paralysis. In functional hemiplegia it was almost the rule to find the face escaping paralysis; it being usually a paralysis of the limbs, in which frequently the motor affection was associated with well-marked paralysis of sensation, amounting in some cases to absolute loss of sensibility. In illustration of this, there was a case in the hospital under his care marked by complete loss of all kinds of impressions, with considerable rigidity of both paralysed extremities on the right side and to a minor extent on the left side. Nothing very definite was known in regard to the mode of causation of these cases. Some people named them hysterical, and rested satisfied with what seemed to him to be no diagnosis at all. If they looked at it from a broad point of view, and said it was functional in its origin, no lesion in the brain being observable either by the naked eye or the microscope, it was still clear that it must depend on some cause producing a diminution of function in certain tracts of the brain. This was usually explained by supposing that a localised vaso-motor spasm existed in certain parts, cutting off the blood supply, rendering them anæmic, and so diminishing their functional activity. But the fact that these conditions could be maintained so long as they were frequently known to be rendered that explanation unsatisfactory, and all they could say was that there was something which lowered the functional excitability of certain regions of the brain. The prognosis in these cases was good; the patients, after a variable period in different instances, generally recovering completely. Since the actual conditions causing this form of paralysis were not known, no very rational method for curing the malady could be adopted. It was well understood that in these cases a certain fringe of the complaint was due to the fact that such patients did not exert their will to do certain things, and voluntarily caused other disabilities; but the mere rousing of the patient could only be adequate if it could be supposed that all the symptoms were brought about purposely by the patient. But as phenomena existed which, with all their anatomical knowledge his hearers could not produce in themselves, it could scarcely be thought that these patients could bring about such conditions of their own will. No doubt there was behind the co-existing mental state of the patient something they could not exactly comprehend. We have to act with a view of improving the nutrition and general health, both physical and moral, and trust to this unknown condition gradually abating. In cases where the loss of sensibility was not absolutely complete, the application of faradisation or of the wire brush to the skin was undoubtedly a potent means of bringing about amelioration of the symptoms. The emotional conditions produced in this way might have something to do in annulling the underlying causative conditions.

Cases, abrupt in their onset, due to hæmorrhage or vascular occlusion, tending to produce softening in the brain, were very common, the latter form being due either to embolism or thrombosis. The prognosis in this class of cases formed a many-sided question, because we had at the onset a more or less marked comatose condition, which often proved fatal to the patient; and also various sequelæ might occur—loss of speech, mental defects, absolute paralysis of the limbs, &c.—as sequences of the brain lesion occasioned in that way, and the question arose as to whether they were likely to be permanent or not. In forming a prognosis in the apoplectic state, one must estimate the depth of the insensibility or coma, the degree of flaccidity of the limbs, the amount of stertor; and the rectal temperature, taken from time to time, should always be resorted to as an aid in this direction. In slight coma the rectal temperature may not fall below 96° (99·4° being the normal). In many cases it will not go below that point; but where the temperature drops to 95° or 94°, and remains at that low point for two, three, or four hours, the patient will very likely die in an hour or two. So that it may be said, when the temperature drops below 96° in the rectum soon after the onset of the apoplexy, the case is to be considered serious. In other cases, called "ingravescent apoplexy," one finds the coma deepening and the amount of paralysis increasing—cases in which there is reason to believe that the bleeding is still going on within the cerebrum; or, if it were a case of thrombosis, that this process was still extending in the vessels. In either of these cases the temperature would go on falling as long as this aggravation in the vascular condition was being brought about. In some instances the temperature may not sink so low, but the coma may be well marked and continue so for twenty-four hours or more. The risk of a fatal issue in these cases is always great. The prognosis should, indeed, be of a very guarded character in all cases of apoplexy, because at any time there may be an aggravation or renewal of the symptoms produced by fresh bleeding.

In regard to the treatment of patients in the apoplectic condition, the patient should be put in a recumbent position in a cool room, the head and shoulders being well raised; and if there is much heat and throbbing about the head, cold applications or an ice-bag should be applied and the legs and feet wrapped up with flannel and hot bottles applied. If the face be much flushed, some sedative, such as twenty grains of bromide of potassium and four or five minims of the tincture of aconite, should be given to calm the circulation and thus help to check further bleeding. Cases of apoplexy often admit of very little being done in the early stages in the way of direct treatment, because of the great difficulty in diagnosing between cerebral hæmorrhage and incipient softening due to thrombosis. Some people are apt to think—and the less experienced they were the more they were apt to think—that hæmorrhage and incipient softening are diagnosed very readily—that there is not, in fact, much difficulty in distinguishing the one from the other. That was not the opinion of Trousseau, who long ago said he considered it one of the most difficult problems in medicine, and the experience of Dr. Bastian taught him that that was absolutely true. He knew nothing more difficult in many cases than the diagnosis between these two conditions. He had seen a patient seized with apoplexy of the most profound type, who died in the course of four hours, with symptoms such as usually occur with very large hæmorrhages into the ventricles or into the pons Varolii, but after death nothing existed but a complete thrombosis of the basilar artery. The lecturer cited another case, of lesser severity, in which a man presented all the indications of cerebral hæmorrhage—apoplexy, of sudden onset, and complete paralysis, coexisting with chronic renal disease and hypertrophy of the left ventricle. Yet at the necropsy a thrombus was found occluding the middle cerebral artery. These cases showed the difficulty of diagnosis in the apoplectic condition, especially where the details and the exact mode of onset were not known; and therefore he urged upon them not to be too active in treatment during the apoplectic condition because the indications in these two causal conditions (hæmorrhage and thrombosis) were absolutely the reverse of one another. If they had to do with a case of occlusion from thrombosis or embolism—say, of the basilar artery or the middle cerebral,—it was clear, in order to diminish the consequences of that obstruction, that they ought to do everything to promote the collateral circulation.

Nothing should be done that would tend to lower the tension within the vascular system, which indeed should be increased so as to assist in opening up the anastomosing channels and thus help to diminish the area cut off from its blood-supply. The patient required stimulants in moderate amount, digitalis with ether or aromatic spirit of ammonia, to strengthen the cardiac action. But if the conditions were due to hæmorrhage, this treatment would be the very thing that was most harmful to the patient. For in that case the action of the heart should be depressed and the tension within the vessels diminished. The indications were diametrically opposed during the comatose conditions due to hæmorrhage and to thrombosis respectively. In certain cases it might be pretty clear that they were dealing with embolism, as in the case of a child, say, with valvular disease of the heart and paralysis coming on abruptly; they might with reasonable safety infer that such a child was the subject of embolism, and therefore might with safety attempt to treat it in the way above indicated. But in a very large number of cases it was not safe to act in any very decisive way, and therefore they ought to attempt no very active treatment, the risk of doing harm being so great; they should rather keep the patient quiet, watch the course of the disease, and endeavour by safe and simple means to steer him through his apoplectic condition.

When that condition has cleared away the patient is then left paralysed, and he may afterwards suffer from amnesic speech defects, in which names could not be recalled, though they could be readily pronounced by the patient; or from aphemic defects (defects in articulation), occurring with lesions on either side of the brain, especially if near the base or in the pons Varolii; or the patient might suffer from aphasia proper, which occurred most frequently with right-sided paralysis. The prognosis was subject to great variation. In some, after two months or so, the speech defect cleared up absolutely; while in others it lasted for years, or for the remainder of the patient's life—differences depending on the seat of the lesion and whether parts immediately concerned with the operations of speech were themselves damaged, or only pressed upon. If the lesion were only on the confines of such a portion of the brain, then in time there might be a restitution of function; but if the lesion actually involved a part of the brain in some way or other concerned with the actual production of speech, then there must be a permanent defect left, often aphasic, but as often amnesic in type.

Other sequences of the apoplectic condition occurred in the form of epileptiform attacks. Patients who have had an apoplectic seizure might have convulsive attacks with the onset of the hemiplegia, usually unilateral, implicating the paralysed side of the body, and recurring from time to time. Where the parietal cortex of the brain was damaged, the attacks assumed the form known as "Jacksonian epilepsy," in which unilateral convulsive attacks occurred, affecting either the whole of the side, or only a portion of it—the partial forms sometimes recurring in the shape of mere spasms, without distinct loss of consciousness. In other cases the convulsions might be two-sided, and cease after some months of proper treatment by bromides; while in others they remained for much longer periods, and treatment with bromides only rendered them less frequent. Altered mental states revealed themselves not unfrequently, after the apoplectic condition, in the form of hallucinations or delusions; and sometimes blindness occurred on the same side as the hemiplegia. In these cases the damage seemed to be in the track of the posterior cerebral artery which supplied the corpora quadrigemina of one side; he had known such blindness occurring where that vessel was cut off from supplying those portions of the brain. These cases varied as regards their prognosis. In some the disturbed mental condition existed only over a comparatively limited period and then cleared off; in others it remained more or less permanent, requiring the removal of the patient to an asylum. Cases, however, like this were distinctly rare. But in many instances an emotional weakness, crying or laughing with undue ease, might be expected to exist for a certain time after apoplectic attacks. In very many cases, however, the patient got out of the apoplectic condition, and was simply left with paralysis of the limbs on one side of the body, very often absolute. In regard to these cases, the question whether the patient would recover or remain paralysed was not to be answered too quickly; they should wait to see how the patient went on during the first few weeks before expressing any positive opinion about it. From a prognostic point of view, it might be said that the more rapidly the patient began to show some power over the movements of either limb the greater the probability was that after a time the paralysis would wholly or in part disappear and leave the patient with some use, at all events, of that limb. It did not follow, however, that both limbs would recover equally, and in a great many cases the leg recovered more completely than the arm; but sometimes the reverse of this happened. It might be said that if the paralysis remained absolute for some considerable time—say, a fortnight or three weeks,—the prognosis ought to be very guarded indeed as to the patient ever thoroughly recovering from the attack. If, however, he began to recover in the course of five or six days, and the recovery was progressive, he would after a time very likely recover altogether. In these cases a certain amount of rigidity and some exaggerated reflexes might exist which should not lead them to take too gloomy a view of the cases. Such rigidity with exaggerated reflexes might exist in the early stages, and yet there might be no absolute destruction of the pyramidal tract and no secondary degeneration of the spinal cord, because at first the hæmorrhage might occur into the brain near the internal capsule, and that extravasated blood by pressing upon it would for a time annul its functions, thus causing the paralysis, the rigidity, and exaggerated reflexes; but after the blood was partially absorbed and the pressure taken off from the pyramidal tract the rigidity and reflexes might abate, and such a patient might ultimately recover quite as well as one who had shown no such signs.

Taking the flaccid cases first: they must allow them to go on for a few weeks without attempting to do much for the limbs themselves; and after that time, if any slight motor power had returned, it should be favoured by gentle faradisation of the paralysed limb, so as to restore the proper nutritive condition to the muscles, and thus enable them to respond more quickly to any voluntary impulses that reached them. The patient's recovery in this stage might be expedited by the administration of such tonics as liquor strychniæ in three or four minim doses with liquor arsenicalis and the citrate of iron and ammonia; and, having seen that the patient gets proper and regular sleep, that he takes his food well, and where it is possible that he is got often into the open air in chair or carriage, one must then trust principally to time.

Cases where rigidity developed and increased after a time—say, in one arm—were of bad prognostic significance, especially if it set in slowly and affected different segments of the arm; it might then be expected to be more or less permanent, and to increase rather than to diminish. He knew of nothing that was of much service in mitigating this condition. Electricity was not recommended because the rigidity showed that the muscles were in free relation with the spinal cord and their nutrition in these cases did not soon become impaired; electricity did little good in bringing about any diminution of the spasm. Years ago one was led to expect results of that kind from faradisation of the extensors and the application of the constant current to the flexors which were in a state of spasm. He was not satisfied, however, that such treatment produced any very definite results; but there was no harm in trying it, and also of promoting the circulation of the limb by friction and shampooing. Certain rare cases of hemiplegia were associated with rapid atrophy of the muscles, though, as a general rule, atrophy did not occur except slowly and from mere disuse; such cases were greatly benefited by the application of electricity. If the muscles responded to the faradaic current, it should be used; if anything like a reaction of degeneration existed, recourse should be had to the constant current.

In regard to abscess of the brain, which might spring up as a sequence of blows or of suppurating disease of the middle ear, the diagnosis was often difficult. The paralysis was insidious and accompanied by pains in the head, vomiting, symptoms of fever, and occasionally local tenderness. The prognosis was about the worst that could be given if the patient was left in the hands of the physician only. Nothing that would have a curative effect could be done by medicine alone; it was there that the surgeon had come to our aid so well of late. We are now able to diagnose these cases with fair success, to mark out the situation in which the abscess exists; and they are opened, thanks to the better methods now employed, with comparative safety to the patients. Such patients occasionally

recovered completely; the treatment being facilitated by the fact that abscess, as the result of ear disease, tends to occur especially in two situations in the temporo-sphenoidal lobe, and also in the cerebellum. Both are regions the affection of which do not tend to produce any very great amount of hemiplegia, so that one might have very grave abscess in the brain, with other symptoms more or less definite, and only a very small amount of hemiplegia associated with it. Another condition, rare in this country, but common in South Australia and in Iceland, where hydatid disease is very prevalent, is the occurrence of hydatid cysts of various sizes in the brain, weighing from an ounce to a pound or more. Nothing enabled them to diagnose hydatid of the brain, unless symptoms of tumour arose, in a person already the subject of hydatid disease. In that case there might be fair suspicion that the symptoms were due to cerebral hydatid disease. Modern surgery might help us here, and, by a small puncture, lead to the arrest of its growth; and no more reason existed why the surgeon should not intervene in the case of hydatids than in the case of abscess of the brain.

Pachymeningitis might be placed among the tumours, whether of syphilitic or non-syphilitic origin. When tumour of the cerebrum or of the cerebellum was diagnosed formerly, the prognosis was of the very worst description, except it could be shown that the tumour was of syphilitic origin, when a considerable hope was left that such a case might yield to treatment; because it had been found that pachymeningitis, giving rise to optic neuritis, unilateral paralysis, mental degradation, and other symptoms, might abate under treatment by large doses of iodide of potassium combined with mercury. They sprung up late in the history of syphilis, often many years after the primary affection. They were cases where large doses of iodide of potassium, beginning with ten grains and gradually increasing to twenty, thirty, or forty grains three times a day, were required. In America as much as two or three ounces in the course of twenty-four hours were given, which was said to produce very good results. In this country we rarely went beyond forty grains three times a day, and that was often combined with forty-five minims or a drachm of liquor hydrargyri perchloridi.

Some cases of tumor cerebri were suitable for surgical treatment. If the tumour could be diagnosed to exist in the cortical region of the brain as a local superficial growth, it might be excised with considerable chance of success. In some cases the tumour was found too large for excision, but great relief was given to some of the symptoms by the removal of a part of it, as was done in a case operated on by Mr. Victor Horsley, where, although cure was not complete, considerable benefit had accrued to the patient.

Even where surgical aid was not suitable, experience in this hospital and elsewhere had shown him that the prognosis should not be absolutely gloomy, as, either under the influence of drugs or by spontaneous changes, an amelioration of the condition of the patient might take place, and lead to the disappearance of the worst type of symptoms belonging to cerebral tumour. Four cases of this kind had come under his notice, all of them instances of cerebellar tumour; but of course the same kind of changes might equally well take place in tumour of the cerebrum—the mere locality of the growth in these cases not affecting the question much. It was shown by a necropsy made by the lecturer last year of one of these patients who had had symptoms of cerebellar tumour which subsequently in great part disappeared, but who afterwards died of some intercurrent affection, that the central portion of the growth had formed into a cyst-like cavity remaining in the site where the central portions of the soft glioma had broken down and become absorbed. Pressure was thus taken off the brain, and the result was gradual cessation of most of the symptoms. He could only suppose that in the other cases (one of which he would show them) something similar had occurred.

[After the lecture there was a demonstration of ten cases of single and double hemiplegia caused by hæmorrhage, embolism, thrombosis, syphilis, and tumours in different sites.]

EARLSWOOD ASYLUM.—The annual festival in connexion with this useful institution is announced to take place on Wednesday next, under the presidency of Alfred L. Cohen, Esq., supported by the Lord Mayor and Sheriffs.

ABSTRACT OF THE

Milroy Lectures

ON THE

ETIOLOGY AND PREVENTION OF PHTHISIS.

Delivered at the Royal College of Physicians,

BY ARTHUR RANSOME, M.D., F.R.S.

LECTURE I.

TUBERCLE at the present day carries off annually nearly 70,000 persons in the form of phthisis, at ages between fifteen and forty-five, the most useful stages of human existence; it kills more than one-third of the people who die, and nearly half between fifteen and thirty-five. Moreover, in its prolonged and painful course it either prevents its victims from earning their livelihood, or at least interferes greatly with their daily work. Its habit of seizing upon the flower of the population, its slow but almost certain progress towards death, the utter misery of the last few months or weeks of existence—all these are features in the fell disorder that render its study all-important not only to medical men, but also to the statesman and to all who are concerned with the welfare of the nation. Up to a recent period not only was consumption supposed to be incurable, it was also regarded as almost inevitable, and the fate of the consumptive patient himself was generally looked upon as hopeless; the dictum of Sir Thomas Watson that "tubercular disease when established is beyond our power" being currently accepted as the truth. But these views of the inevitable character and incurability of phthisis are now altered; for not only does clinical evidence show a considerable percentage of cure and improvement under judicious treatment, but the evidence derived from the post-mortem examination of adults who have died from diseases other than phthisis shows that a very large percentage of persons have suffered and have recovered from tubercular disease of the lungs. With regard to the preventability of the disease still less can any doubt prevail; during the last thirty years the returns of the Registrar-General show that the annual rate of mortality from phthisis has been reduced by more than one-third. This improvement, which is not confined to England, is too large to credit to greater accuracy in diagnosis; it is attributable to the prevention of phthisis by improved hygiene. The records of the mortality from this disease in the British army and navy furnish evidence of the strongest kind of the influence of sanitary measures as a preventive of consumption, and Dr. Buchanan has shown that good drainage of a locality may diminish by one-half the prevalence of the disease.

Though the special pathology of tubercle has been thoroughly searched out for many years, it must be remembered that medical science does not stand still, and within comparatively recent times great additions have been made to our knowledge of the subject. It is now eight years ago since Professor Koch succeeded in demonstrating the existence of a specific organism in all tubercular diseases, and by pure cultivations of the bacillus, and by numerous experiments on animals, he may be said to have fully proved its essential relation to the disease. The early years after this discovery were taken up with its verification and its application to previously ascertained facts. Clinical researches and inoculation experiments served only to more firmly establish Koch's observations. I shall attempt to bring into one field of view the various facts bearing on the natural history of the organism, its favourite haunts and breeding-grounds, the soil most favourable to its growth, the food that will nourish it into virulence, and, most important of all, the conditions under which it may be robbed of its power for evil. One consequence of the successful search for a cause for tubercle, and that perhaps not the least important, is that it thrusts aside all former speculations as to the nature of tuberculous growths; the essential pathology of phthisis, according to modern notions, may be stated very briefly. Dr. C. T. Williams says that reaching the alveolus through the breath, the bacillus enters the epithelial cell and causes proliferation by irritation. The alveolus becomes

stuffed with cells; and if the irritation be a gradual process, it gives rise to a highly nucleated product, the giant cell. If the irritation be great, caseation is rapidly produced, though whether this be due to to necrobiosis from overcrowded proliferation, or, as Mr. Watson Cheyne thinks, to a chemical change in the cells brought about by the action of the bacilli, is not yet determined. The irritative masses thus formed set up a hyperæmia with consequent migration of white blood-corpuscles, and thus the diseased focus tries to keep off the bacillus from the system by encapsulating itself. The epithelioid cells have been described as arising from the action of the tubercle bacilli on the fixed cells of the connective tissue or on the epithelium, and out of the epithelioid cells the giant cells proceed, an increase of nuclei taking place in them while the partition of the cell body is omitted. If the bacilli are few, then the epithelioid cells and giant cells will be abundant; but if the germs are numerous, then the white corpuscles will emigrate and gradually supplant the larger cells. In Ziegler's words, "we must regard tubercle as an inflammatory product, an infection." It is believed by many that the constitutional manifestations of tuberculosis are not directly due to the bacilli, but to toxic principles evolved during their growth and multiplication. The characteristic points connected with the growth and development of the bacillus are the small range of temperature within which the organism can be successfully cultivated (between 86° and 107° F.), the length of time (from two to three weeks) required for its development, its tenacity of life in sputum, and the antagonism that exists between the living elements, especially the wandering cells, the leucocytes of the body, and the bacillus. The reason of tubercle spreading infectively through the system has also been made plain.

The mode in which the bacillus gains access to the body has been long recognised; the virus causing it evidently comes from without. Thus we see usually a primary and immediate attack upon the respiratory system, the lungs, pleuræ, bronchial and tracheal glands; next in frequency to be attacked come the glands about the pharynx, and next after these, probably owing to the swallowing of the sputa, we find the lymphatic apparatus of the walls of the intestine, the isolated agminate follicles, most liable to be the seat of tuberculous ulceration. The œsophagus escapes contagion because of the rapidity of the transit of the virus and the stomach, perhaps owing to the presence of the gastric juice. Through the intestinal ulcers a path is opened to the mesenteric glands, the liver, and the whole of the rest of the body, thereby producing general tuberculosis.

The placing of tuberculosis amongst microbic diseases imposes upon us the task of determining its affinities and assigning to it its place among other such disorders. Tubercle can only be said to be allied to ordinary epidemic diseases in the sense that they are all parasitic disorders. It may rather be regarded, like leprosy, as a type of an endemic disease. Whether contagious or not, phthisis is sharply marked off from ordinary exanthematous disorders, not only by its specific micro-organisms and its endemic habit, but also by its usually slow, creeping, and irregular course, and by the permanent growth, alteration of structure, and destruction of tissue that are brought about by the bacillus. In searching for the diseases kindred to tubercle we must look for those which are chronic, endemic, irregular in their course, and produced by the action of a micro-organism which is of comparatively feeble power of irritation, but which, nevertheless, brings about inflammatory action tending to produce permanent changes and necrosis of the tissues, travelling along the lymphatics or in the currents of the blood. Chronic glanders, or farcy, includes most of these points of resemblance. It is produced by a bacillus. The farcy buds closely resemble tubercles in their structure. Like tubercle, it has been known to attack the nervous system, to produce intractable ulcers of the skin and mucous membrane and affections of the joints; susceptibility to it is enhanced by unhealthy conditions of life. A close affinity to tuberculosis may also be traced in such diseases as actinomycosis, frambœsia, and Madura foot. In actinomycosis nodules somewhat like tubercles form, having in their centre the fungus surrounded by a zone of large nucleated cells, and these again by a small-celled area. The disease, too, seems to preserve a somewhat endemic character, but it is at present chiefly epizootic, and the micro-organism causing it belongs to an order distinct from the bacillus of tubercle. But the closest resemblances are to be found between tubercle, syphilis, and leprosy; and perhaps at some future time, when the microbe of cancer has been made out, this disease also may be added to the group. All are of microbic origin, are capable of varying degrees of intensity, possess the power of renewing their ravages after varying periods of dormancy, produce growths strikingly similar pathologically, and are or have been found distributed apart from considerations of climate, race, and habits of life. Syphilis is in certain points more like an exanthematous disease; but, nevertheless, it appears to be due to a bacillus, and the lesions characteristic of it appear to result from the irritative action of the organisms. But of all these disorders the nearest approach to tubercle is to be found in leprosy. In their pathology, in their course and distribution, and in many other features, these diseases show the closest relationship. A micro-organism is associated with each disease, and the bacillus of leprosy resembles that of tubercle both in its appearance and in its reception of staining fluids. Koch points out, however, that although the bacillus of leprosy can be stained by the same method as the tubercle bacillus, the contrary does not hold good for the former stains by Weigert's method for colouring nuclei, but not the latter. The bacilli of lepra are also found in much larger proportion in the diseased tissues than those of tubercle. Leprosy is like tubercle in its mode of attack, contagion taking place first on the exposed parts; and it also resembles it in being slow in its progress, though it is usually slower than tubercle, both diseases tending towards a fatal issue, but both being capable of becoming absolutely quiescent and inert for long periods. Again, although the leprosy bacillus affects chiefly the skin and mucous membranes, the nerves, and bones, in its tubercular forms the structure of the leprous "knots" gives ample evidence that they are formed in the same way as those of tubercle. Both are distinctly endemic diseases, and are, or have been, found in almost every country where human beings are collected together in any number; they are equally uninfluenced by climate and temperature, and, as phthisis is now, so leprosy was formerly, endemic not only in Asia and Africa, where perhaps it originated, but also throughout Europe. It existed in Lombardy as early as the year 630, and in the eighth century many leper-houses were founded in France, England, Germany, and Italy. Its presence even now is sufficiently manifest in the four quarters of the globe to show that it is independent of climate. India is its great hotbed, though it seems to have a special predilection for islands. Though certain races are more prone to it than others, none are entirely exempt. It is more common amongst the poor and filthy than amongst the rich and cleanly. It appears amongst those who are well fed as well as amongst those who are confined to vegetable diet and those who feed upon fish. In the early times and middle ages in all countries leprosy was regarded as contagious, and this belief still remains in places; indeed, the greatest differences of opinion on this point are even yet found amongst medical men. Similar differences of opinion are to be found as to the influence of heredity in both diseases, and a recent writer states with regard to leprosy that, though it is not an hereditary disease, the susceptibility of the individual appears to be of more importance than in any other bacterial disease. It is not surprising that, with all these points of similarity, the question should be asked whether leprosy is not itself a tuberculous disease. In answer to this, it may be said that tuberculosis is now seldom seen in leper hospitals, and the acute form of the disease is not more frequently seen amongst phthisical lepers than amongst other persons affected with phthisis; again, the different behaviour of the two kinds of bacillus in cultivating media, their selection of certain tissues as their chief haunts, and the difference in their rate of progress, show that, though closely related, there is no identity to be discovered between them.

Certain practical conclusions may perhaps be drawn from this review of the pathology and affinities of tubercle which may assist us when we come to deal with the question of its preventability. (1) That the bacillus which provokes the disease comes most frequently from outside the body, and is conveyed by means of the atmosphere; (2) that it requires a certain length of time and certain narrow limits of temperature within which it can develop; (3) that when it is entrenched within its encapsulating tubercle it is placed at a distance both from the current of blood in the vessels and from air entering through the lungs; (4) that its life in the

body is usually a short one, and that the lung tissues are antagonistic to it, or, to use Dr. Moxon's words, "the life of the bacillus parasite is difficult, easily discouraged by unfavourable circumstances, like an aphis by an easterly wind"; (5) and that the resemblances which it bears to the bacillus of leprosy may encourage us to hope that, as this latter disease has been banished from our country, so also may the different forms of tuberculosis ultimately disappear.

DOUBLE CURRENT TUBES FOR VAGINAL AND INTRA-UTERINE INJECTIONS IN OBSTETRIC PRACTICE.

By GRAILY HEWITT, M.D., F.R.C.P.,

EMERITUS PROFESSOR OF OBSTETRIC MEDICINE, UNIVERSITY COLLEGE; CONSULTING OBSTETRIC PHYSICIAN TO UNIVERSITY COLLEGE HOSPITAL.

1. Double Current Tube for Vaginal Injections in Childbed.

In the interests of efficient antisepsis in midwifery practice the present method of administering vaginal injections in childbed seems susceptible of improvement. In hospital midwifery practice antiseptic vaginal irrigations used under the most favourable circumstances, and with care and skill, have proved of the greatest service. It by no means follows, however, that the regular and indiscriminate employment of vaginal injections in childbed is to be recommended for ordinary midwifery practice; where the services of a skilled nurse being not always available, it is therefore more difficult to supervise their proper employment. From facts which are recorded it appears that vaginal injections now and then produce the very effect they are intended to prevent. It seems probable, however, that a part at least of the liability to mischief from the use of vaginal injections in childbed is connected with inherent defects in the construction of the apparatus employed; and, if so, it is desirable that these defects should be remedied.

The vaginal tube which is generally used is of gum elastic, and is about the size of the finger. The fluid escapes from the tube through perforations situated close to the extremity. This vaginal tube appears to be most objectionable for a variety of reasons. The tube is difficult to clean, it is liable to become clogged with detritus possessing probably septic properties, and this is especially liable to occur at the perforations for escape of fluid. The prevention of such partial clogging of the tube requires incessant vigilance on the part of the nurse. Moreover, it is impossible to say from simple inspection of the tube that it has been properly cleansed. Another great objection is the size of the tube, the smallness of which allows of its entering the os uteri and so passing into the cervix without any great difficulty if the os happens to be in a favourable position and direction. When such entry happens, the tube may be made the means of carrying septic material from the vagina into the cervix, and the injected stream of water will either enter the uterine cervix or may pass altogether into the uterus. In cases where the tube has entered the uterine canal and happens to fit it tolerably well, the tube will of course act as a cork, and fluid injected will pass more certainly into the uterus, and possibly also into the peritoneal cavity through one or both Fallopian tubes. An instance of this latter occurrence was recently described by Dr. Charles Scott Watson in a paper in THE LANCET of Dec. 21st, 1889, entitled "A Case in which Peritonitis was caused by Vaginal Syringing after Two Successive Confinements." Probably a considerable number of such cases could be collected.

To fulfil the necessary requirements, the vaginal tube through which fluid is injected should be so much larger than the one at present in use that there will be no liability of its being pushed into the cervix uteri; it should deliver the fluid at the top of the vagina. There should be a provision for a return current to promote ready escape of the fluid from the vagina, and the material of the tube should be such that it can be easily cleansed—the only material which appears to fulfil the requirements being glass, which allows of ready inspection as to the safe condition of the tube for injection purposes.

Some months ago I exhibited at the Obstetrical Society a vaginal injection tube (see Fig. 1) intended to meet the necessities of the case. It is a glass tube 4¾ in. long, with a diameter of 1½ in. The tube is very deeply grooved with four grooves in the longitudinal direction, the grooves acting as channels for the easy escape of fluid from the vagina. It is therefore virtually a double current tube. The tube has rounded apertures placed in a circle close to the distal extremity. It can be readily affixed to the indiarubber pipe of an ordinary syringe or connected with a reservoir douche. Thus a copious irrigation of the vagina can be kept up as long as is thought desirable. The fluid used should

FIG. 1.

Vaginal double current tube. (Half the actual length.)

FIG. 2.

Double current intra-uterine tube (Half the actual length.)

not be less than a pint, and should be made properly antiseptic. To avoid entry of air the tube should be filled with fluid before being introduced into the vagina. One objection to which this vaginal tube may possibly be thought liable is the material, which, being of glass, renders it liable to break if carelessly handled or allowed to fall on the ground. It offers as a compensation greater guarantee for efficient antisepsis, and should be capable of being safely employed by an intelligent nurse.

2. Double Current Tube for Intra-uterine Injections.

I need say nothing as to the exceeding value of intra-uterine injections in properly selected cases. In reference to the *technique* of the procedure, the necessity for providing for a return current in the employment of intra-uterine injections has been long recognised. I believe Budin first adopted the principle of using a deep groove for the return current; modifications of this principle have been since employed. I exhibited at the Obstetrical Society a short time since a glass tube adapted for this purpose, grooved deeply externally on four sides (see Fig. 2), and thus providing more efficiently and conveniently for a return current. The glass tube measures ten inches in length and seven-twelfths of an inch in diameter; the tube is deeply grooved at the uterine end for half or three-quarters of the whole length. It is very slightly curved at the uterine end. The tube is readily fastened to the rubber tube of a syringe or reservoir douche. The fluid injected escapes into the upper

part of the uterus through apertures arranged near the extremity of the tube, and readily flows out of the uterus through the longitudinal grooves. Being provided with four grooves, there are virtually four tubes for escape of fluid from the uterus. It should be filled with fluid before introduction in order to prevent entrance of air. I have employed this instrument with the greatest success in four cases where antiseptic irrigation of the interior of the uterus was necessary, and I consider that being of glass it possesses very great advantages over tubes of opaque material. This tube is, I need hardly say, only intended to be employed by the medical attendant. It may be suggested that in cases where intra-injection is employed, the prior irrigation of the vagina by means of the vaginal tube would be desirable.

Berkeley-square, W.

CARDIAC DISEASE IN PREGNANCY AND LABOUR.

A CASE OF MITRAL STENOSIS COMPLICATING PREGNANCY AND LABOUR.

BY FREDERICK EDGE, M.B., B.Sc. LOND., F.R.C.S. ENG.

KNOWING the great interest which there is concerning cases of cardiac disease complicating pregnancy and labour, I think that I shall only be doing my duty in recording the following case, and calling attention to the more salient features of it. Also in referring briefly to the causation of the symptoms, and to the best methods of avoiding and relieving the dangers arising in these cases.

Mrs. B—— was a house-patient of St. Mary's Hospital, Manchester. She was thirty-four years of age, and this was her first pregnancy. She had been under treatment during the fourth and fifth months of pregnancy for cough, dyspnœa, and palpitation, and had been relieved to a great extent. She was just over seven months pregnant from her own reckoning when I examined her. She had the pinched, starved facial appearance which a woman of weak health often presents in later months of pregnancy. Her face was covered with acne rosacea. She complained of pain in her chest and breathlessness, with palpitation, and her breathing was orthopnœic, not being able to lie down at night. Her family history was not good, and several members of her family died of phthisis. The patient had suffered from rheumatism many times, and from deprivation in food, clothes, and dwelling. She had been troubled for over a year with a cough and muco-purulent spit, and at times she spat blood. The cough had grown worse suddenly a week ago, and she had noticed a little blood in the sputum since. On inspection, the chest was thin and flat. The supra- and infra-clavicular regions were depressed, more so on the left side. The apices were dull on both sides, and tubular breathing, with moist sounds, was heard over them. However, I did not examine the lungs sufficiently carefully and systematically to be able to say more about them. The apex beat of the heart was in the normal position. A thrill was felt at the apex running into the apex beat. On percussing out the heart the transverse dulness in the line of the fourth ribs was increased on the right side of the sternum. On auscultation the typical presystolic (auriculo-systolic) murmur was heard at the apex, and also systolic and diastolic murmurs. The second sound was reduplicated and more accentuated in the pulmonary area than in aortic area. The pulse was irregular and intermittent at times. Her appetite was poor. She was passing a diminished amount of urine. She was sitting in a chair and could get about with little difficulty. She was put to bed and supported with pillows, finding that position more comfortable than lying down. A mixture containing iron and digitalis was given, also saline laxatives were ordered, and she had a cough mixture which she took when the cough was troublesome. She was under the care of a trained midwife. On the evening of July 2nd she was seized with labour pains, and the midwife attended. The midwife reports nothing remarkable in the early stages of labour. The os was dilating gradually and was soft and pliable on examination. At noon on July 3rd she became suddenly worse, and the resident obstetric assistant surgeon (Dr. Annacker) attended and I went with him. The patient was now extremely distressed, and she cried "Oh! my heart, my chest," indicating the organs which were least equal to the strain of the second stage of labour. The child presented by the breech, and delivery was hastened by traction on the groins first, with the finger and then with a blunt hook, and as the child was immature both femora were broken in the process of extraction, which had to be hastened as much as possible. Before the head was born, the patient, who was supported by pillows and held herself in a sitting posture gasping and faint, suddenly collapsed and became cyanosed and insensible. The delivery of the head was at once effected. The placenta was brought away by hand immediately to cause bleeding. Brandy-and-milk enemata were given. Flannels wrung out in hot water and covered with turpentine were applied to præcordium. Artificial respiration was performed as one or two respiratory gasps were noticed after the heart impulse and pulse were lost. All pulsation in the cardiac region and in arteries having stopped, and there being no respiratory efforts, the case was considered hopeless, and further treatment was not tried. Unfortunately I did not obtain permission for a post-mortem. The condition of the patient before labour began was, in my opinion, as follows. The apices of both lungs were affected with tubercle, the left apex more extensively (my incomplete examination does not permit me to say in what stage of disease). About ten days before labour some hæmorrhagic infarcts occurred. The heart muscle was weak and degenerating. The mitral value was stenosed. The left ventricle was not hypertrophied nor dilated to an appreciable extent. The left auricle and the right ventricle and auricle were dilated.

Dr. Berry Hart points out that in these cases the danger is in the third stage, and I quite agree with him when the second stage is quickly and easily passed, and the heart disease is not in an advanced condition. But as is seen in this case, the second stage is most acutely dangerous and fatal when the disease is not compensated for and the strain is severe, since it causes stoppage of the heart—an organ which, as we see in giving chloroform, is not easily started again when once stopped. During the second stage of labour the abdominal expulsive muscles coming into action raise the intra-abdominal pressure by which the uterus, with other viscera, is compressed. Now during a pain the uterus is contracted and retracted upon its contents; thus the uterine and placental sinuses are emptied of their blood at this time by the two forces acting together. The intra-abdominal pressure tends to drive all this blood and the visceral blood out of the abdominal cavity. At this same time the diaphragm has descended in its contraction, and thus a vacuum exists in the thoracic cavity, as in ordinary inspiration, only of greater power. Hence the blood expelled from the abdomen is sucked into the thoracic cavity, since there is no resistance offered, and there is a *vis a fronte* in addition. Here it overdistends the large veins and the right heart, and may be said to drown the heart, which is already overtaxed with the driving of blood into the overfull pulmonary system. There is another factor. The centre for uterine contractions and the uterus itself are excited by carbonic acid in the blood, so that the dangerous state of semi-asphyxia maintains one of the chief causes of overdistension of the heart by keeping up the uterine contraction. And, in addition, the convulsions of asphyxia, as they affect the respiratory muscles, are chiefly inspiratory at first, and thus tend to keep up the thoracic engorgement.

I think that in these cases marriage should be forbidden, notwithstanding any social position, careful nursing, and treatment, and against the "aspirations morales" of which Jaccoud speaks. The case is different when the patient is pregnant. Here I should like to see the opinions of some authorities as to the advisability of inducing abortion at the third month; for it seems to me that if this operation is allowable at all, there is the most urgent call for it in cases of pregnancy with mitral stenosis, since the mother is going on to a fearful risk of death if allowed to go to a period when the child should be viable, and in which the child more often dies than lives after birth. Dr. Herman[1] asks why they should not induce premature labour instead of giving strophanthus &c.; but I should like to ask, Why induce premature labour? Why not induce abortion at the third month? However, allowing that it is decided to let the case take its natural course, I think that the treatment given by Dr. Macdonald and Dr. Berry Hart is very good. The patient is to be kept at rest and digitalis or strophanthus given to assist the cardiac muscle in its attempt at

[1] Year-book of Treatment, 1889

compensatory hypertrophy which is necessary in pregnancy, and especially in this case for the right ventricle and the left auricle. Chloroform should be given during labour, or better perhaps, chloroform should be used to anæsthetise the patient, and then ether given to keep the patient under, since ether does not depress the cardiac muscle so much as chloroform. Labour should be hastened by forceps or turning. In the third stage of labour free hæmorrhage relieves the engorged vascular system. Ergot should not be given unless there is no cardiac embarrassment and the hæmorrhage is too free. If no bleeding take place from the uterus and the heart's action fail, cupping over the heart should be practised, and I think that wet cupping would give speedier relief than dry cupping. Venesection from the arm, or even from the external jugular vein, should be done in cases of extreme urgency. I think that the question of venesection of the external jugular is worth consideration, and it has occurred to me that did these cases come within the province of the surgeon we should hear of this procedure not infrequently. With our recent knowledge of the contraction of muscle, and knowing that when the weight or tension on a muscle has exceeded a certain point the muscle becomes lengthened instead of shortening in its action or "contraction," it is easy to see the great effect which might be produced on the heart muscle by relieving it of too great tension at a critical moment, as might be done by section of the external jugular vein, and venesection from the arm would have a much less direct and immediate effect. The child was premature and was treated for the fractures, and union took place, but afterwards died of bad feeding and neglect which caused ulcerative stomatitis and general marasmus.

St. Mary's Hospital, Manchester.

TROPHOPATHY IN THE FATTY AND FIBROID DEGENERATIONS.[1]

BY EPHRAIM CUTTER, M.D., LL.D.,
AND
JOHN ASHBURTON CUTTER, M.D.,
FORMERLY ATTENDING PHYSICIAN TO DISPENSARY NO. 3 OF THE INTERNATIONAL MEDICAL MISSIONARY SOCIETY.

THE animus of this contribution is the belief of the writers that trophopathy (*trophos*, food; *pathos*, disease) has more to do with the cause of the so-called incurable diseases than the profession gives credit to; and to show that our belief is founded on facts, we will immediately proceed to the consideration of the subject in the concrete—to wit, the reading of some histories of patients that have been under our care.

CASE 1.—A little more than four years ago a gentleman brought to our office a friend, who appeared to the senior writer to be almost moribund; indeed, he feared that the man would die in the office. Examination showed the patient to be suffering from an enlarged heart, a fibroid liver, and Bright's disease of the kidneys; the urine contained albumen, casts, and fatty epithelia. We will here make note that in our study of patients for the evidence of Bright's disease little care is paid whether the casts are fatty, hyaline, waxy, &c. Amyloid bodies are usually found in the urine when the kidney is first breaking down. But we consider no case to be full-fledged Bright's disease till albumen, casts, and fatty epithelia are found. There may be any one of these three, or any two. It is a common matter to find such cases which are just hovering along the margin of health and disease, and yet not full-fledged, so to speak. This patient, desperate as his case was, went under the treatment to be further on described, and recovered, and would be here to-day for your examination if possible. His heart, liver, and kidneys are now doing healthy work.

CASE 2.—About one year before his death, America's greatest laryngologist, Dr. Louis Elsberg, came under the care of the senior writer. His case was one of Bright's disease, with all the signs, as before enumerated. He was placed on rigid diet, and would take no medicines. This regimen he followed out for months, and all of the morphological and chemical evidences of his disease disappeared from the urine. He was then allowed some latitude in his diet. The senior writer called one morning early at his office and found Dr. Elsberg at breakfast, eating freely of all the starches and sugars that were placed before him. It was said to him, "Elsberg, if you persist in this reckless diet, you will kill yourself." The medical world knows how he died suddenly of pneumonia—perhaps Bright's disease of the lungs.

CASE 3.—About four years ago a millionaire was treated for two months for Bright's disease of the kidneys and lungs. At the expiration of that time, feeling *too poor* to continue under a physician's care, he undertook the direction of his own case, ate wrongly, overworked himself, and, while superintending some repairs in his house, was poisoned with sewer gas. The doctor was sent for again, but the good work that had been done for him in the two months' treatment was thoroughly undone, and he died.

CASE 4.—In June, 1880, the senior writer called to see a primipara in a non-professional way. She was within three weeks of her expected confinement, and to his horror he found her bloated. On examination the urine proved to be heavily albuminous, and contained casts and fatty epithelia. She was placed on rigid diet, but labour came on in thirty-six hours, and she was easily delivered of her child, which weighed only three pounds and a half. The placenta was covered with numerous elevations, which, under the microscope, proved to be made up of plates of cholesterine. Two days after her confinement a steam fire-engine came to the corner near the house in which she lived, and, having been fastened to a hydrant, commenced to pump. The noise worried her; entreaties to the engineer to desist were of no avail, and the poor woman went into convulsions. The senior writer arrived soon afterwards. She was kept under the influence of ether, and was purged, but the convulsions did not cease till thirty-six hours had elapsed. She was placed on a diet of beef-tea; no medicine. Later on, broiled steaks were given her. The face was drawn to the side, and her brain was very weak. The regimen was persisted in till the pathological evidences were removed from the urine, and since this time her diet has been two-thirds animal and one-third vegetable food. She has borne two more children, both of whom are much more rugged than the first, and there have been no more convulsions.

CASE 5.—Mrs. —— went on treatment about four years ago, and on thorough examination was found to be suffering from fibrous consumption, Bright's disease, and a small fibroid tumour of the womb, about the size of a man's fist. The evidences of Bright's disease disappeared; the fibroid tumour has gone; and we can say that she is cured of her fibrous consumption, if there is such a thing as a cure of a chronic disease. She is now passing through the change of life, and can by no means be called a thoroughly well woman, yet if she is here to-day, I think you will find, on talking with her, that she considers the diseased condition above enumerated as not troubling her now.

CASE 6.—Three years ago a young married woman came to our office and was found to be suffering from Bright's disease of the kidneys; indeed, it is rare to find urine that contained as many casts and of all kinds as hers did. She was placed on treatment, and in one month's time the pathological evidences had nearly all disappeared. She persevered, and is to-day enjoying good health.

CASE 7.—The Rev. ——, treasurer of a great missionary society, came under our care at about the same time as Case 6. He also had Bright's disease. He went on treatment, though keeping at his work. His loss of flesh and strength at first greatly disturbed his wife, and it was hard work to make her believe that he should be held to the plans. After three months he took a holiday in Maine, still pursuing the plans of diet and medication, and in the fall came back to work. This case may be called in progress. His occupation is a very laborious one, tiring to the mind and full of worry. At the present he is under the plan of two-thirds animal and one-third vegetable food, eating one kind of meat and one vegetable at a meal. On June 18th, 1889, his specimen presented no casts, no fatty epithelia, and but a trace of albumen. Yet he tells us that he has never in his life worked so hard as the last month, and wonders that he holds on as well as he does.

CASE 8 (1877).—The senior writer saw in consultation a lady who was said to be dying of Bright's disease, and that the attending physicians wished blood to be transfused into

[1] A joint paper read before the Section of Practice of Medicine, Materia Medica, and Physiology of the American Medical Association, at its fortieth annual meeting, 1889, by the junior writer.

her veins. She was as white as the sheets she lay between, was vomiting, and her urine confirmed the diagnosis made by the attendants. Before going back to Boston to get instruments to transfuse with, the senior writer sat down beside her, and, taking a diet list from his pocket, asked her if she could eat the different foods as named thereon. She said "No" till tripe was mentioned, and replied that she could eat that. So it was ordered. On returning with instruments the next day, he was told that there was no need of operating, as the patient had retained the tripe and was better. In March, 1886, we were in this neighbourhood operating on a case of uterine fibroid. The father expressed to the son a desire to see if this patient was alive, and on calling on her attending physician learned that she was, and on visiting her, found a large, florid woman, who said "that she was not much for work, but was far from being dead." It seems that she lived on tripe and milk warm from the cow, with other animal food, for over two years, and by that time the evidence of Bright's disease had gradually and wholly disappeared from the urine.

CASE 9.—Some years ago, Miss A. B——, aged twenty-four years, was put on strict diet for her fibroid, which was of some years' standing, monolobed, interstitial, and hard; it invested the whole uterus, and extended beyond the umbilicus. She ate beef mostly, with clear tea and coffee, and took a simple tonic. It was much against her appetite, but, as she was a woman of few words and of a determined will, and had confidence in her medical adviser, she persevered until the uterine fibroid had all disappeared, and she remains to-day in perfect health. At present, in handling these cases of uterine fibroids both diet and galvanism are employed, the latter according to the rules laid down by the senior writer in 1871. No one can say that this case was cured by the menopause, as so many medical agnostics as to the curability of uterine fibroids by either galvanism or food, or both, claim.

CASE 10 (1882).—Mr. H. L. H——, a small, not robust man, over sixty years of age, for many years had difficult digestion, caused by over-feeding upon vegetable food, so that the stomach was distended, walls infiltrated and hardened, causing a fibroid condition of the organ. When seen by the senior writer, he had been under treatment by Dr. Salisbury with hot water, chopped beef diet, stomachic medicines, &c. He ran down rapidly under the treatment, vomiting often and severely; throat sore and deglutition difficult; emaciation; weakness; some fever at times. He had fainting fits, and appeared so moribund that his wife thought he would die in her arms. His hands, feet, and legs were cold; circulation feeble; stomach distress great; mind clear and tractable. There was also complete dulness on percussion over the hepatic region; the abdomen empty; walls drawn towards spine, flat, hard, not tender. He took no food by the mouth, but milk by the rectum. Was given nitric acid baths, one teaspoonful to one pint of warm water, night and morning; biniodide of mercury, 1/16gr., was given twice a day; one grain of the sulphate of quinine was sprinkled once in two hours on the tongue, which was white and coated. Compress of linen cloth wet in the nitric acid bath was placed over the hepatic region and kept till the skin was red. Though the vomiting continued for a little time, the effect of the rectal aliment told. The administration of mercury was followed by a diminution of the liver dulness. Soon he was able to take beef essence by the mouth; though he had no appetite, still he kept taking it, and by degrees increased the amount till the essence of six pounds of beef daily was used by oral and rectal alimentation. Moving very carefully, the rectal administration was given up and the beef essence continued by the mouth. The case slowly improved, the urine showing less and less reaction of bile, the dulness of the liver running abreast, with the exception of a few days—that is, the dulness diminished with the diminution of bile in the urine. In the course of six weeks the appetite returned, the former treatment was resumed, and he remains cured (1889).

CASES 11, 12, and 13 were all suffering from Bright's disease in 1878, 1880, and 1884. In Cases 11 and 12 the patients were each about sixty years of age, and in Case 13 twenty-four years old. All were practically treated on the same plans, and all are here to-day for your inspection as cases of cures of a so-called incurable disease.

CASE 16 (1876).—A middle-aged mother of a large family lay sick in bed of great grief at the loss of her last surviving daughter, who had died from the effects of the perforation of the vermiform appendix by an orange seed. There were present cardiac hypertrophy and insufficiency of the left auriculo-ventricular valve, with severe attacks of angina pectoris, when it seemed that death was near. The objective lesions other than those named were retroversion, engorgement, hardening, and eversion of the os uteri, and behind the uterus four small, hard, marble-like tumours; very severe pain, sharp and stinging, in the pelvis mostly; profuse vaginal discharge, not bloody; menorrhagia. Added to this there was loss of appetite so complete that everything in the nature of food was loathed, even milk being repulsive; loss of flesh and strength, being unable to rise erect for ninety days; inability to lie on either side for most of the time; nausea; legs cold and sweaty up to the knees; ofttimes great stomach distress, with wind colic; urine high-coloured and of a rank smell, as if putrid; bowels constipated; a terrible feeling of nervous restlessness, causing her to move her feet rapidly up and down in the bed; visitors coming and assuring her by their looks and actions that she was about to die. Added to this there was cancer in her family, her father having died of cancer of the stomach, and her maternal grandmother of cancer of the breast. She was put on general and local treatment, and it was faithfully carried out in connexion with good nursing; but she gradually grew worse, until, at the expiration of three months, the symptoms were so alarming that the senior writer was obliged to take strong and decisive grounds, and to tell her, "You must eat or die of cancer of the womb. Make up your mind to one or the other." She decided to live and to eat; eating against her appetite, but with her intellect and reason and the advice of her medical attendant. She began with tender loin steak, broiled and cut up very fine. The most she could take at first was a quantity represented by two teaspoonfuls; these she swallowed by a desperate effort, her stomach rising against it. She was fed every four hours. Even after she had fed thus for weeks she felt she would rather die almost than eat, but battled against appetite by sheer force of will. The only way she could get down the beef was by swallowing one mouthful of lager beer, which was the only article which did not go against the stomach. The quantity of meat was increased gradually, and she was fed two months against the appetite. The nausea, however, left in about three or four weeks, and at this time she was able to be moved, and was placed in a Cutter invalid chair part of the day. After two months of feeding she was taken carefully to the sea-shore, and there she began to get an appetite, but it took one year before she could walk 500 feet. This patient did not fear death, but the form of it. The results obtained by food are in this case:—1. Heart normal in size. 2. Valvular insufficiency hardly perceivable. 3. Angina pectoris gone. 4. Uterine disease relieved; tumours disappeared; uterus mobile discharges normal. 5. Urine clear as champagne, specific gravity 1015–1020; no odour; no deposit on cooling. 6. Restoration to active duties as housekeeper and mother of the family. No medicine was given after the food treatment, save Hoffmann's anodyne when she had palpitation of the heart and difficulty in breathing. When we state that this case is here to-day, we think our hearers will admit that we have a living argument that we cannot ignore as to the curability of chronically diseased tissues. As the time is short, we will give no more histories, and proceed to the closing section of this contribution.

(To be concluded.)

THE ABDOMINAL DISTENSION OF TYPHOID FEVER: ITS DANGERS AND TREATMENT.

BY T. J. MACLAGAN, M.D., M.R.C.P.,
PHYSICIAN TO THEIR ROYAL HIGHNESSES PRINCE AND PRINCESS CHRISTIAN.

AMONG the many complications which tend to increase the dangers and anxieties inseparable from a severe attack of typhoid fever, none are more formidable than those which are the direct outcome of the bowel lesion. Among the dangers thus induced, none causes more anxiety, or more gravely affects our prognosis, than the extreme abdominal distension with which in severe cases we every now and then have to deal. A moderate amount of tympanites is a common symptom, and does not call for special treatment, but in severe cases it may become immoderate; the abdo-

minal distension may be so great as to not only cause considerable distress, but, by its upward pressure on the diaphragm, to materially increase the danger of an already sufficiently grave illness. What adds to the gravity of this complication is the fact that it comes on late in the case, when the patient is already pulled down by two, three, or more weeks of fever. The condition essentially consists in great distension of the large bowel. Sloughs and sloughy discharges from the lesion in the small bowel have been slipping through the ileo-colic valve into the cæcum. As a rule, the diarrhœa which accompanies this process leads to their early discharge by stool; but they may be detained in the cæcum or colon, or if very abundant may not be got rid of with sufficient rapidity to prevent the colon from getting distended by the gas formed during their rapid decomposition. The evil is constantly being added to by the descent of sloughs and putrid discharges from the ileum, and by-and-by the bowel gets paralysed from over-distension. The condition is not unlike that which has frequently to be dealt with in the case of the bladder; and, as in these cases of bladder distension in the typhoid state, a certain amount of urine may dribble away, occasionally leading the attendants to think that the bladder has been relieved, so in these cases of distended bowel a certain amount of flatus and fluid may pass away without any real relief being given. So long as the muscular coat of the bowel retains the power to contract the danger from distension of the colon is not imminent, and relief may be given by the administration of a stimulant enema—turpentine, carbolic acid, &c. But the distension may be so great as to paralyse the muscular coat of the bowel. Under such circumstances no enema can make the bowel act; and from such treatment no good, and possible harm, may result. When such a point is reached the patient is in imminent danger. The colon may become, from absence of the usual resistance of its muscular coats, very rapidly distended; such distension, besides causing much distress, produces pressure on the diaphragm, impeding its action, and embarrassing that of the heart and lungs. Such pressure, if not relieved, is likely to cause death; for be it borne in mind, it occurs only in the advanced stages of bad cases in which the typhoid state is marked, the cardiac systole feeble, and in which the addition to the already existing troubles of any other complication readily turns the scale against the patient.

Such extreme distension of the colon, with its attending dangers, may be developed very rapidly. It calls for prompt treatment. To give enemata is useless; for the muscular coat of the bowel is so distended that it cannot act. Nay, it is worse than useless; for it is only adding to the contents of an over-distended bowel. There are only two ways of giving relief—to tap the colon by a fine trocar, or to pass a long tube into it by the rectum. The former proceeding, though attended with very little danger, cannot be said to be free from risk. The passing of a long tube up the bowel is not only void of all danger, but, as a means of relief, is much more speedy and efficacious; for not only does the flatus pass away more readily and freely through the tube than through a cannula, but there passes away with it much of those putrid and sloughy contents of the bowel, whose retention and decomposition cause the whole mischief. The following cases illustrate the beneficial effects of this method of treatment.

CASE 1.—A gentleman, aged thirty-six, of full habit and previous good health, had a severe attack of typhoid fever. Tympanites became a marked symptom early in the third week, and by the eighteenth and nineteenth days it was sufficiently great to increase the patient's restlessness and to cause some anxiety. Enemata of turpentine had been given without affording any relief. On the twentieth day there was great distension of the abdomen, the skin being quite tight; the patient was wandering and very restless; breathing was short and hurried, 42 per minute; pulse 120, feeble; temperature 103·4°. The tongue was dry in the centre; there was slight hiccough. A little dark-coloured fæcal discharge, with some flatus, was passed involuntarily in bed. Nourishment and brandy were taken frequently and in small quantity, and were occasionally rejected. The patient was much distressed and in imminent danger. A long tube was without difficulty passed into the bowel; there at once passed away a large quantity of flatus, and about a pint of dark-coloured, liquid, fæcal matter, having scattered through it a number of shreddy particles, evidently the remains of sloughs. The patient seemed much relieved. Half an hour after it was noted that he was quieter and much less restless, the abdomen was less tense, the respiration had fallen to 36, the pulse was 116, and the temperature had dropped to 102·2°. This was at 4 P.M. At 10 o'clock the temperature was 102·8°; pulse 116; respiration 36. The tube was again passed; a good deal of flatus and a small amount of dark fluid again coming away through it. The patient passed a better though still restless night. On the following morning there was some return of the abdominal distension and the restlessness, though neither was so marked as before; the tube was again passed with a like result, a large quantity of flatus came away, followed by nearly a pint of dark fluid fæces with sloughy shreds scattered through it. For several days the tube was passed three times a day; by this means the distension was kept down, the bowel was relieved of its offensive contents, and the patient was freed from the most pressing danger. Coincidentally with the relief thus afforded there took place an improvement in his general condition. The pulse, temperature, and respiration all fell after the tube was used for the first time, and never again rose to the same point; hiccough ceased entirely, and the patient retained all his nourishment. On the twenty-ninth day of the fever there was a marked fall of the temperature and a little all-round improvement; the abdomen was less full; the expression was improved; the tongue was moist all over. On the thirtieth day, the improvement was maintained, and on the morning of the thirty-first day the temperature reached the normal. From this time progress was uninterrupted.

CASE 2.—Miss L——, aged twenty, had a severe attack of typhoid, with all the symptoms well marked. In the fifth week of the disease the abdominal distension, which had been a sufficiently noticeable feature for some time, became rapidly very great, and the patient was extremely distressed and apparently sinking. When I saw her there was great distension of the abdomen, the skin of which was quite tense; the patient was prostrate and wandering, restless, and breathing in a distressed and irregular manner, about 44 per minute; the pulse was 128, feeble; the temperature 103·9°. She was evidently suffering from pressure on the diaphragm. There was no long tube at hand, and matters were urgent, so I cut the valvular extremity off from the tube of a Higginson's syringe, and introduced the tube into the bowel as far as the ball. There passed away a great quantity of flatus with about a pint of dark liquid fæces with a number of sloughy-looking shreds floating about in it. The patient was at once much relieved; she became less restless, the respiration dropped to 36, and became more regular, the pulse improved, and the tempeture fell to 102°, a fall of nearly two degrees, within an hour after the passage of the tube. A proper tube was obtained, and passed several times daily for nearly a week. The patient slowly improved, and made after a long time a perfect recovery.

CASE 3.—A young man, aged twenty-three, had much abdominal distension in the third week of an attack of typhoid. On the twenty-first day there was extreme distension and great prostration, with muttering delirium, dry tongue, feeble pulse, and a temperature of 104·1°. The abdominal distension had rapidly increased, and its increase was accompanied by a corresponding prominence in the urgent symptoms. He was restless, muttering, very prostrate, and rejected all nourishment. A long tube was passed into the bowel. There at once came away a large quantity of flatus and dark-coloured fluid fæces, with here and there shreds of sloughy-looking matter scattered through it. All the urgent symptoms were distinctly relieved, the temperature in half an hour fell to 103·2°, nourishment was again retained, and he slowly gained ground, though the tube had again to be used on several occasions. The abdominal distension never became again a source of anxiety; but the case continued in rather a severe form till the patient died of perforation on the twenty-ninth day of the disease.

In the first and second cases I believe that the timely passage of the tube saved the patients' lives, for in neither could the pressure on the diaphragm have gone on for many hours longer without causing death. Many cases there are, of course, in which the passage of the tube, though it relieves the urgent symptom for the relief of which it was used, cannot save the patient from the other dangers of the disease. By relieving the pressure on the diaphragm, however, it saves him from that danger, and gives him one more chance of life. Case 3 illustrates this.

Cadogan-place, S.W.

A COLLECTION OF CASES OF HYDROPHOBIA REPORTED AS SUCCESSFULLY TREATED.

BY F. LUCAS BENHAM, M.D., M.R.C.P.

(*Continued from p. 490.*)

CASES TREATED BY MERCURY.

Case 23.—Moseley.[1] Female, aged thirty, bitten by rabid dog Dec. 3rd, 1807. Incubation twelve days. Then the bitten hand became painful and numb; she had horrible dreams, could not drink, and the sight of water brought on trembling and great distress; sighing, terror, and dread of water. Mercurial inunction was freely employed (ung. hyd. fort., 4oz. in forty-eight hours). Salivation in nineteen hours; symptoms soon subsided, and she recovered.

Case 24.—Lipscomb.[2] Case of hydrophobia "decidedly marked" twelve days after bite. Mercurial inunction exactly as in preceding case. Gums and bowels much affected by the mercury; recovered.

Case 25.—Pope.[3] Female, bitten on the thumb by rabid dog. In two or three weeks the arm became inflamed and all the symptoms of hydrophobia appeared. Profuse salivation was set up, and in two or three days all spasms and convulsions had ceased. It is regrettable that the only source of this information is a newspaper paragraph.

Case 26.—Barnes.[4] Male. Severe symptoms of hydrophobia about three days after scratch from the teeth of a dog which had been bitten by a mad dog three or four months previously. Paroxysms were very frequent and violent, and were brought on by the least noise or touch. A calomel vapour bath was administered, and continued (four hours) till all symptoms had subsided and he was profusely salivated. No return of hydrophobia. The author had no doubt of the nature of the disease, though he should have described it more fully. The evidence of infection is weak, owing to the short period of incubation, if the patient's account was correct.

Case 27.—McReddie.[5] Male, aged twenty-four, bitten by a dog (mad?) on Oct. 24th. Illness commenced on March 10th. Admitted to hospital on March 14th. The symptoms were—anxiety, tremors, difficulty of breathing, and extreme sensibility to light and sound. Treated by calomel fumigation, which produced salivation in a quarter of an hour, and chloroform inhalation. This case is a doubtful one, as the characteristic horror of water and pharyngeal spasms were absent.

Case 28.—Wyllie.[6] A similar but presumably characteristic case is reported, in a letter appended to the same paper, of a boy who had been cured in 1853 by rapid salivation by calomel fumigation.

CASES TREATED BY ARSENIC AND EXCISION OF THE CICATRIX.

Case 29.—Varenne and Tomkins.[7] Female, aged thirty-five, bitten by a dog almost certainly rabid, on June 22nd. Attack began with slight symptoms on June 30th; fully developed on July 5th; aversion to swallowing and sight of fluids; intolerance of light. Attempt to swallow produced spasm of throat and fit, pain up the arm from site of wound, with unconsciousness and convulsions. Liquor arsenicalis given in large doses, and the cicatrix was excised on July 7th, only one fit afterwards, and swallowing became easy. She became salivated by the arsenic and gradually improved. This case is disbelieved by Youatt, on account of the dog surviving a week; but other cases prove that this is not an insuperable objection.

CASES TREATED BY COLD AFFUSION OR SUBMERSION.

Case 30.—Moore.[8] Male, aged twenty-one, believed to have been bitten by a mad dog. Seized suddenly with intermittent convulsive attacks. Spasms brought on by attempts to swallow and sight or sound of water; seemed choking, and kept hawking and spitting frothy mucus. Cold douche applied speedily and freely caused the spasms to subside, and was renewed when they returned. Nitrate of silver was applied to neck, and chloroform inhalations were given later. In a few hours the spasms were overcome, and patient recovered.

Case 31.—Moore.[9] Male, aged fourteen, bitten by a rabid dog six weeks before. When seen had been suffering from the usual symptoms twelve hours; dread of liquids, spasms on approach of water, and hawking and spitting exceedingly well marked. Treated as preceding case with same good result.

Currie does not seem to have employed cold affusion in this disease, though he speaks as if he believed in its efficacy. He says that he had seen five fatal cases, in none of which was there any rise of temperature.

Case 32.—Van Helmont mentions the case of an old man cured of developed hydrophobia by prolonged submersion.

Case 33.—Van Swieten.[10] Female, aged twenty, cured by repeated plunging (till insensible) into cold salt water.

CASES TREATED BY VAPOUR BATH &C.

Case 34.—Rev. C. Curran and Dr. Exton. Boy at Industrial School, Arlington, New Jersey, bitten on the hand by a (rabid?) dog, Jan. 2nd. Wound healed, and the boy thought no more of it. On Jan. 22nd he became ill, had violent convulsions, and in paroxysms tried to bite.—Jan. 24th: Convulsions more frequent, and unmistakable symptoms of hydrophobia; pain in head and side, and pressure at epigastrium; choking, so that he could not swallow. Sound of a bell provoked spasms. Vapour bath ordered as long as it could be borne (half an hour), followed by jaborandi, chloral, and bromide of potassium. After a profuse sweat all symptoms vanished except difficulty of swallowing, which before long subsided also.

Case 35.—Case near Odessa.[11] Boy bitten by a rabid dog, April 1st. On April 25th, signs of hydrophobia; unable to swallow liquids, the sight of which induced paroxysms. Treated by sweating in vapour bath (42° Réaumur) twice daily for three days. Discharged cured.

Case 36.—Dr. Buisson. Incipient symptoms of hydrophobia, after inoculation with rabies, were speedily removed by a vapour bath, taken with the intention of procuring euthanasia.

Case 37.—Grant and Loane.[12] Male. On Nov. 20th an inflamed sore noticed on back of hand, due to bite of a dog three months before. Great horror at sight of any fluid; violent spasms of muscles of throat and neck on putting any vessel to his mouth, so that deglutition was almost impossible. On 21st several similar violent convulsions affecting face also; mouth clogged with viscid mucus. Was partially delirious. A warm bath removed symptoms, and next day he could swallow. Relapses took place on the 23rd and 26th, but he was quite well by the 29th. Treated also by salines and purgatives, and opium externally and internally. Convalescence was interrupted by a severe attack of intestinal obstruction and hæmorrhage, due to fæcal accumulation, which brought him again to death's door, but he eventually recovered.

CASE TREATED BY OLIVE OIL.

Case 38.—Shadwell.[13] Male, aged twenty-two, bitten by a dog almost certainly rabid. Incubation about eleven days.—Dec. 29th: Became ill and depressed; had a sort of trance, and then became excited and violent, and tried to bite. Had convulsive paroxysms, and rejected liquids with horror, and was visibly affected by cold air. Treated by olive oil internally and externally. Paroxysms grew slighter, and none are recorded after Jan. 2nd, though he was still affected by noise and cold air. By Jan. 7th he swallowed freely. This case appears genuine, though details are not very fully given. The method of cure is singular, and would not be considered very powerful.

CASES TREATED BY CURARE.

Case 39.—Offenberg.[14] Female, aged twenty-four, bitten on heel by rabid dog on July 28th, 1874. Hydrophobia appeared on Oct. 16th; agitation, restlessness, and muscular tremors; inspiratory spasm and general convulsions, with sense of imminent asphyxia. Violent pharyngeal spasms on trying to drink. No elevation of temperature. Spasms increased in spite of morphia and chloroform. Curare begun three hours after explosion of attack, in doses of one-third to half a grain, frequently repeated (19 centigrammes in

[1] Hydrophobia, its Prevention and Cure, third edition, 1808.
[2] History of Canine Madness, 1809.
[3] Extract from Wolverhampton Chronicle, date unknown.
[4] Ind. Med. Gaz., 1868. [5] Ibid., 1867. [6] Ibid.
[7] THE LANCET, 1835, vol. ii.
[8] Med. and Phys. Trans., Bombay, 1861.
[9] Indian Annals of the Medical Sciences, Calcutta, 1860.
[10] Comm., vol. xi.
[11] THE LANCET, May 29th, 1886, and Daily News, May 7th, 1886.
[12] Medical Gazette, vol. vi
[13] Medical Society's Memoirs, vol. ii., No. 24.
[14] Rec. de Trav. Comité Consult. d'Hyg. pub. de France, 1883.

four hours and a half). Spasms became less frequent, then less violent, and gradually ceased, some paralysis supervening. In the next few days there were occasional spasms, and a slight relapse. Disease disappeared on the eighth day.

Case 40.—Polli.[15] Child aged twelve; attack eighty days after bite of rabid dog. Morphia injections and chloroform inhalations used ineffectually. Under curare (three grains in seven doses in five hours and a half) paroxysms rapidly yielded and were replaced by paralytic symptoms; in two days a slight relapse occurred, cured by another injection of half a grain.

Case 41.—Watson.[16] Male, aged forty-eight, bitten on right forefinger, Dec. 20th, by a rabid dog which bit four other persons, one of whom died of hydrophobia on Feb. 1st. Attack began on Feb. 6th after depression of from seven to ten days. Rigor, vomiting, tightness of præcordia, slow breathing, and attacks of respiratory spasms with much anxiety; any current of air caused shuddering and dread. The only aversion to fluids was shown by refusing cold water; he could drink warm fluids and had a considerable quantity of stimulants. Was treated by strychnia, one-twelfth of a grain every three hours until the fifth day, but grew worse, and was becoming exhausted by the respiratory spasms; then curare was given instead in doses of one-sixteenth of a grain, after which he soon became quiet and rational, lost his spasms, and recovered.

This is not a clear case, though infection was certain; the phenomena were not typical, perhaps modified by strychnia. However, Watson and Austin Flint, who both saw the case, agreed that it might be genuine.

[ERRATUM.—The reference of Case 9 (published last week) should be to *Chambers' Journal*, Feb. 12th, 1881, not 1884.]

(To be concluded.)

TWO CASES OF

FATAL POISONING BY CARBOLIC ACID.

BY J. H. DAVIES, M.D.,
MEDICAL OFFICER OF HEALTH FOR MARGAM, ETC.

ON New Year's eve two fatal cases of poisoning by carbolic acid occurred at Margam, Glamorgan, and came under my observation. One of the victims was a farm bailiff (H——) aged thirty years; the other a farm lad (T. D——) aged sixteen. The mishap occurred as follows:—A boy was sent to fetch a jar of beer from the cellar about 7.15 P.M., and in mistake brought up a jar containing a sheep-dip. The bailiff poured some of this into a jug, handed it to the farm lad, who drank a couple of mouthfuls, and exclaimed that he had had coal-tar; then the bailiff himself drank about half a tumblerful of the liquid, and, seeing that there was a mistake, he immediately called on the others not to take any of it. The lad had to be assisted to his home, which was distant a quarter of a mile. I saw the bailiff shortly before 11 o'clock. Owing to the farm being four miles from my house there was an interval of forty minutes between the reception of the message and my arrival. The patient was in bed, moaning, with his legs drawn up; foam and stains of a yellowish colour about the mouth; his pulse could hardly be felt; skin cold and clammy, and the face pallid, and covered with cold sweat; the pupils were contracted, and conjunctivæ congested. There had been free vomiting, and the vomited matter smelt strongly of carbolic acid. The man was in a semi-comatose and hopeless condition, and could only with great difficulty be got to swallow some olive oil. He had frequent convulsive movements, principally confined to the facial muscles and those of the upper extremities. In the case of T. D—— the symptoms were similar, but the coma was not so profound; in his case vomiting had occurred earlier, and this was made more complete by the early administration of mustard and water. In both cases the injected and suffused conjunctivæ and the contracted pupils made a very striking picture. The bailiff died in about six hours after taking the poison, and the lad in about eight hours. The fact that both patients were profoundly under the influence of the poison when first seen, that their mouths and gullets were severely burnt by the acid and the knowledge that both had vomited freely, and milk and oils had been administered, tended to show that the use of the stomach-pump after the lapse of nearly three hours would be productive of more harm than good, so the treatment adopted was the application of warmth, the giving of oil and milk, and a solution of sulphate of soda as an antidote. The boy also had a drachm of ether administered, but its effect was only slight.

A post-mortem examination of the body of T. D—— was performed on Jan. 2nd, forty hours after death, and the features that obtained in his case would apply more or less to the other. There was much post-mortem staining of dependent portions of the body; the rigor mortis was passing off. There were yellowish stains around the mouth, and much frothy mucus about the lips and flowing from the nose. The membranes and vessels of the brain were much congested; the lateral ventricles contained about three drachms of fluid each, which had a faint odour of carbolic acid. The choroid plexus was of a deep purple colour. The mucous membrane of the mouth, pharynx, and œsophagus was corroded by the acid, and peeled off readily. The mucous surface of the stomach was of a deep-red colour, sodden, and detached in places, and coated with tenacious mucus, with hæmorrhagic spots scattered here and there; it contained a little oil and milk and emitted a strong odour of carbolic acid. The small intestine was distended with gas and congested. The liver, kidneys, and especially the spleen, were congested. The bladder contained half an ounce of urine, which was of a greenish colour and had the odour of carbolic acid. The pericardium contained half an ounce of fluid which smelt faintly of carbolic acid. The heart's action had been arrested in diastole, the left side being firmly contracted, and the right full of blood which had not coagulated. The larynx was unaffected, the lungs were emphysematous in parts, and the bases deeply congested. The right lung was almost universally adherent to the chest wall.

It seems a pity that the public generally are not better informed as to the fatal properties of carbolic acid, since it is in such general use at present. The remark was made at the inquest that the reason medical aid was not called in sooner was because the patient's friends were not aware that carbolic acid was poisonous, and no wonder, for the liquid was kept in an ordinary spirit jar without any label indicating its poisonous nature. The schedule to the Pharmacy Act still excludes this potent and deadly poison from its official list in spite of remonstrances, and until this state of things is remedied we can only expect to meet with more and more fatalities of a kindred nature to this.

Port Talbot, Glamorgan.

[15] Le Paris Médical, May, 1877, quoted from MacNeill.
[16] Amer. Journ. Med. Sciences, 1876.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

A FRENCH CATHETER IN THE MALE BLADDER REMOVED BY SUPRA-PUBIC LITHOTOMY.

BY JAMES E. TREVOR, M.R.C.S., L.S.A.

THE history of the following case may prove of interest, showing the possibility and danger of a catheter, when carelessly used, escaping from the urethra into the bladder.

A. R——, aged sixty-five, was admitted into the Ashburton County Hospital, New Zealand, on Oct. 15th, 1889. He had had difficulty in passing his urine for the last eleven years, often finding the use of a catheter necessary. He said that he had never suffered from gonorrhœa or syphilis. In June last, directly after an attack of influenza, he experienced great pain in the region of the bladder, with increased difficulty in voiding his urine, symptoms which continued till his admission into the hospital, with the addition that in the latter part of July he began to pass gravel, and continued to do so almost daily. The urine, which was discharged in a small stream, or by the aid of a catheter, was alkaline, contained a large quantity of pus and mucus, sometimes blood, and on standing became highly offensive. There was a stricture in the membranous portion of the urethra, which prevented the passage of the catheter beyond a No 3 soft or No. 5

silver. On first sounding I only obtained negative results, but afterwards distinct evidence of calculus. Drs. Leahy and Tweed, of this place, afterwards examined the patient with me, when we all distinctly felt something in the bladder, more like a hard ridge than anything else, whilst we failed to obtain characteristic evidence of calculus Nevertheless, as we were certain there was something in the bladder, and his pain and other symptoms were severe, an operation was decided upon, and I chose the supra-pubic, because, having just previously extracted a very large calculus by that operation, I had learnt the great command it gave over the bladder—an important point when, as in this case, I was uncertain respecting its contents.

On Nov. 18th, the patient having been placed under chloroform, I operated in the usual manner, and at the bottom of the bladder found a number of calculi of various sizes, and, on turning my finger round, a stick-like substance coiled upon itself, hard and rigid, which, on attempting to remove, appeared to be rather firmly attached to the surface of the bladder, and proved to be a small French catheter, to which was attached a considerable quantity of phosphatic calculus, much of which fell back into the bladder during withdrawal, and was afterwards removed by the scoop and irrigation. The after history of the case was uneventful. He passed all his urine per urethram on the tenth day, and the external wound is now (Dec. 30th) nearly healed. He is free from pain, in good health, and urine normal. I received valuable assistance in this case from Drs. Tweed and Leahy.

The mystery of the catheter is, I think, easily solved. My patient is not a total abstainer; in fact, he freely confessed that he often drank "not wisely, but too well." In July last, when suffering from influenza, he came in from the country to one of the hotels, went to bed with some hot grog, most likely used the catheter, left it in and went to sleep, and, forgetting all about it, it became drawn into the bladder. At any rate, the pains dated from that night, and the passing of gravel a short time after.

Ashburton, Canterbury, N.Z.

A CASE SIMULATING PEMPHIGUS.

By ARTHUR J. MOSS, M.B., CH.B., &c.

THE case recorded by Mr. Clarke in THE LANCET of Jan. 4th last leads me to describe a case which occurred recently in my own practice.

I was sent for hurriedly late on the night of Dec. 27th last to see a boy aged nine who had been ill all day. The previous day he had been quite well. On arrival I found him restless, and suffering from slight cough, pains in the legs, and bad headache. The temperature was 100·2°. On examination of the legs I found over the anterior tibial region of both an irregular reddened patch some four inches long, on which were scattered numerous small vesicles about the size of a pea. The general appearance of the patches looked exactly like herpes, if such a thing as symmetrical herpes were possible. The bowels being loaded and the tongue foul, I simply ordered a purgative. The mother informed me that she was quite sure the eruption was not present in the morning. At my next visit the boy felt much better; headache and cough had disappeared, and the bowels acted freely. The eruption on the legs had altered in character, the reddened base had faded, but the vesicles had run together to form large bullæ, some of them of the size of walnuts, tensely filled with a clear serous fluid. I now prescribed a little arsenic, and ordered the eruption to be dusted with zinc oxide. In a few days the boy was quite well in general health; the large bullæ collapsed from reabsorption of their contents, and disappeared, leaving a slightly reddened surface to mark their position.

I subsequently found out that the boy on the day of my first visit had been sitting close to the fire all day, and had most probably scorched his legs. But if this be the correct explanation of the eruption, is it usual for the blisters caused by heat to increase so enormously in size after removal of the cause? At first the case was very puzzling on account of the raised temperature, cough, and headache coincident with the eruption. There has been no recurrence of the eruption, and at the present time the patient is perfectly well.

Penarth, Glamorgan.

ALBUMINOUS URINE INDEPENDENT OF KIDNEY DISEASE.

By HENRY LEE,

CONSULTING SURGEON TO ST. GEORGE'S HOSPITAL.

CASE 1.—An eminent engineer when comparatively young met with a serious accident. Many years afterwards it was found that his urine was albuminous. A consultation took place between Sir B. Brodie, Dr. Owen Rees, Dr. Seth Thompson, and myself. The general opinion was that the best chance of prolonging his life was to send him to Egypt. I ventured to remind Sir B. Brodie that when I was his clinical clerk at St. George's Hospital notes had been taken of cases of albuminous urine in which no disease of the kidneys was found after death. The patient went to Egypt. After his return he engaged in a most arduous undertaking, which taxed his energies to the uttermost. This at last he accomplished, but within a very few days he was seized with an attack of apoplexy, of which he very shortly died. Dr. Seth Thomspon, Mr. Charles Hawkins, and myself were present at the post-mortem examination. The kidneys were small, but not diseased. There was an intussusception of the right ureter. The invaginated portion was as large as a walnut and as red as the reddest cherry. This intussusception was subsequently supposed to have occurred at the time of the accident above referred to. The source of the albumen in the urine was now no longer doubtful.

CASE 2.—A gentleman who had had syphilis was under the care of the late Dr. Cumberbatch and myself. He had suppurating caries of one of his ribs; the urine was highly albuminous. Under a mild but sustained course of calomel baths, with a pint of the simple decoction of sarsaparilla daily, he completely recovered; the albumen entirely disappeared from his urine, and he got married.

CASE 3.—A gentleman contracted syphilis early in life. From this he was apparently cured. Later on he had a second attack, and for this the treatment was not properly carried out. For some years he had occasional eruptions of pimples on different parts of the body. For these he took mercury irregularly both in England and abroad. At length he appeared to have been quite cured. Last year he came home from abroad in a great state of alarm, saying that a medical man had sent him home on account of his urine being albuminous. The urine was frequently tested with heat and acid, and there was always a thick white deposit extending half-way up the fluid in the test-tube. The patient seemed much depressed, and had lost considerably in weight. He was ordered nitro-hydrochloric acid and iron. To my great surprise I found after some time that there was no longer any albumen in the urine. I subsequently learnt that this patient had had a most severe family affliction, involving a lawsuit, which had been satisfactorily settled. After the settlement of the lawsuit there was no more albumen in the urine.

Savile-row, W.

CENTRAL RUPTURE OF PERINEUM.

By A. E. WELLS, M.D. LOND.

MRS. T——, a strong, healthy woman, aged twenty-four, was confined of her first child on Feb. 12th, at about the end of the eighth month. Labour was rapid till the head reached the perineum and the occiput presented at the vulva. The pains then lessened, and no progress was made for three hours, although the perineum appeared soft and easily dilatable. I then gave a drachm of liquid extract of ergot, and in twenty minutes moderate pains began and completed the birth in another half hour. On examination, there was found to be a tear of the perineum extending from midway between the anus and fourchette forwards and to the left, just superficially notching the left labium a quarter of an inch in front of the fourchette. At its posterior extremity the tear penetrated into the vagina, there being a hole just admitting the forefinger; but anteriorly the laceration was crossed by a band consisting of the lower part of the posterior vaginal wall and some perineal tissue. Behind and above this was a second very slender band crossing the tear from side to side, and consisting apparently only of mucous membrane. The fourchette was not torn, and the only injury to the vulva was a slight superficial notch on the left labium. No sutures were used, and by the fourth day the laceration was quite healed and the patient subsequently did well.

Cuckfield, Sussex.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

A CASE OF SUBDURAL (ARACHNOID) HÆMORRHAGE PRESSING ON THE LEFT MOTOR AREA, ASSOCIATED WITH CONCUSSION OF THE BRAIN; REMARKS.

(Under the care of Mr. GEORGE LAWSON.)

THE occurrence of hæmorrhage into the cavity of the arachnoid is well recognised as one of the rarer consequences of injury to the head. This case illustrates the condition and presents several points worthy of attention. The seat of the hæmorrhage has usually corresponded to the upper surface of the brain, and it is an important observation that such an extravasation into the arachnoid cavity over the motor area may produce no symptoms permitting of its localisation, while sufficient to cause coma and death. It is easy to understand the presence of these hæmorrhages in patients of a more advanced age, especially when a condition of extensive degeneration of the vessels is present, as in a case described by Dr. Ogle,[1] where the superficial vessels are said to have been very brittle and atheromatous, but not so easy to account for it in a young and healthy man. Hæmorrhage into the cavity of the arachnoid and its consequences have received notice in France under the heading of Apoplexie des Méninges,[2] and in this country Sir Prescott Hewett has given important contributions to our knowledge of the condition. His main conclusions as to the states in which the blood may be found are as follows:[3]—1. It may be either liquid or coagulated; if in the latter state, it may be in clots or spread out in the shape of a thin membranous layer, covering a greater or less extent of the surface of the brain. 2. Sometimes the extravasation presents itself under the shape of a false membrane, possessing more or less of the original colour of the blood; in some cases it is even reduced to the fibrine only, and is of a slightly yellowish tinge. 3. The blood may be fixed to the free surface of the arachnoid, and there maintained by a membrane which to the naked eye presents all the characters of the serous membrane itself. 4. The blood is frequently found enclosed in a complete cyst of varying degrees of thickness, which may be removed unbroken from the cavity of the serous membrane. There is a very good example of this form of cyst recorded in our columns by Mr. Fisher.[4] For the notes of this case we are indebted to Mr. Leopold Hudson, surgical registrar.

J. W——, aged twenty, a male, single, was admitted into the Middlesex Hospital at 11.30 P.M. on Feb. 4th, with the following history. He was considered a good boxer, and was boxing in a competition with a man who had only learnt boxing for three months. The patient had been getting much the best of it, and though during the last round no particularly hard blows were exchanged, he was noticed in the middle of it to become suddenly weak, but he continued to box for a few seconds, when he fell back across the ropes. He did not strike his head as he fell, but when picked up he was quite insensible. He was placed in a corner of the room and left for an hour, when, as he did not recover consciousness, he was brought round to the hospital and at once admitted.

The casualty house surgeon, Mr. George Elam, found him in a profoundly comatose condition. The pulse was at first 50, full and slow; but later, owing to the subcutaneous injection of ether, it became faster and smaller. The breathing was stertorous and interrupted, so much so as to necessitate artificial respiration for some time. The pupils were dilated and fixed, the surface of the body cool, and the extremities powerless and flaccid. A stomach-tube was passed, but only one or two ounces of fluid were found in the organ. A catheter was passed, and half a pint of clear urine evacuated, of specific gravity 1001, with no albumen. Ophthalmoscopic examination yielded negative results. The patient lived for two hours after admission, and remained in a comatose condition; the pulse again became much fuller and slower, the respiration stertorous, and he died asphyxiated in the early morning of Feb. 5th. No spasm was at any time observed.

At the necropsy at 2 P.M. the same day Dr. Sydney Martin found a little dried blood in the anterior nares, a subcutaneous ecchymosis as large as a florin below and to the outer side of the left eye, and a slight extravasation in the upper lid. There was no fracture of the cranial bones and no injury to the meningeal arteries or dura mater. On opening the latter membrane, a quantity of soft blood-clot was found situated over the middle lobe of the left cerebral hemisphere, depressing the subjacent convolutions; it appeared to be derived from the arachnoid. There were three very small ecchymoses beneath the pia mater—one about the middle of the horizontal part of the left ascending parietal convolution, one at the upper portion of the vertical part of the same, and one in the parieto-occipital fissure. There was neither laceration of nor hæmorrhage into the cerebral substance. With the exception of slight atheroma in the commencement of the aorta, the viscera were normal.

Remarks by Mr. LEOPOLD HUDSON.—Sir Prescott Hewett, writing in "Holmes's System of Surgery," says that he has frequently found hæmorrhage into the cavity of the arachnoid in cases where the injury has been a trifling one, and without any apparent lesion either about the brain or its membranes. In the case now recorded the bystanders stated that the blows dealt were none of them severe, and, except the minute punctiform hæmorrhages beneath the pia mater, there was no cerebral lesion. The total absence of localising symptoms left no indication for operative interference.

SUSSEX COUNTY HOSPITAL, BRIGHTON.

SURGICAL CASES.

(Under the care of Mr. WILLOUGHBY FURNER.)

IN few injuries which come under the notice of the surgeon is the good result of careful antiseptic treatment so evident and satisfactory as in the case of wounds of the joints. In the patient suffering from compound dislocation of the wrist—an injury of great rarity—this fact is illustrated, and our readers will note as an important proceeding in the treatment the omission of the drainage-tube. It is a fact recognised by many of the surgeons of the present day that in cases where the wound can be made aseptic, and infection from without prevented, the drainage-tube is unnecessary. This statement applies even though the wound is a large one, such as that produced by amputation of the breast, and it is also acknowledged that primary union may be produced throughout without those risks to guard against which the tube was introduced into surgical practice. The presence of a foreign body in the male bladder is usually due to an accident, such as that described by Mr. Furner, the breaking of the end of an elastic catheter during efforts at self-catheterism by a patient. In most instances it is probably from want of care on the part of the patient, who knows that the instrument is defective, but hopes to postpone the expense and trouble of procuring a new one. These foreign bodies have been removed by the lithotrite, and after median, lateral, and supra-pubic cystotomy. In this patient the presence of the stricture in the urethra prevented any attempt, had such been desired, to use the lithotrite, and the operation of median lithotomy was chosen, as it is sometimes in cases where a calculus of small size is present in the adult and there are impediments to the performance of lithotrity. Mr. Cadge, after considerable experience of the removal of stones by this method of operation, does not recommend it. We have recently drawn attention to the formation of calculi on foreign bodies thus introduced.[1] For the notes of these cases we are indebted to Mr. F. J. Paley, house surgeon.

Compound dislocation of wrist; recovery with perfect movement.—H. M——, aged twenty-eight, was admitted to hos-

[1] Path. Soc. Trans., vol. vi., p. 6.
[2] MM. Fournet et Leriche: Bull. de la Société Anatomique de Paris, tome x., p. 55.
[3] Medico-Chirurgical Trans., vol. xxviii., p. 45.
[4] THE LANCET, vol. i. 1846, p. 416.

[1] THE LANCET, vol. i. 1889, p. 1243.

pital on Oct. 7th, 1889, having fallen twenty-five feet from a scaffolding, doubling his right hand backwards beneath him. There was found a complete compound dislocation backwards of the right hand; the entire carpus and lower ends of the radius and ulna protruded about one inch through a transverse wound of skin across the palmar surface of the wrist, at about the level of the styloid process of the radius. Two tendons were seen stretched tightly across the extruded bones, the other tendons and the median nerve having apparently slipped to either side. The hand was blue and cold, extremely extended, with the fingers strongly flexed on the palm. There was also a jagged laceration on the inner side of the left foot, extending from the malleolus nearly to the ball of the great toe, exposing the extensor tendons, and laying bare a small portion of the scaphoid bone. Under chloroform endeavours were made to reduce the dislocation by extension applied to the hand, but the semilunar bone was found to project so much as to prevent it. This bone was therefore removed, and the dislocation reduced without difficulty, the bones having first been carefully washed with 1 in 40 carbolic lotion. The reduction was followed by rather free hæmorrhage, two or three bleeding points requiring ligature; but neither the ulnar nor radial artery was torn. The limb was put up in straight back and front splints, the anterior having an interruption opposite the wound, which was closed with silver sutures. No drainage-tube was inserted. The wound was dressed with oiled lint. The wound in the foot was sutured with silver and dressed in a similar manner and the leg laid on a pillow. The patient was a perfectly healthy man, and had enjoyed good health previously to the accident.

Oct. 8th.—A good deal of oozing of blood. Wound dressed. Slight swelling and redness. Temperature 99°.

11th.—Wrist had not been again dressed until to-day. Highest temperature so far 100·8°. The wound was found looking extremely well. No suppuration, and the wound appeared to have healed by primary union. No bagging of pus or fluid in the joint was detected. Hand quite warm, and sensitive everywhere; the fingers could be moved well. The wound on the foot was looking well. A small tag of skin had necrosed and was separating; the rest of the wound had nearly healed. The patient had had remarkably little constitutional disturbance, eating and sleeping well.

19th.—Wrist again dressed. A small portion of edge of skin wound had necrosed, leaving a few superficial granulations. No suppuration of the joint.

29th.—There had been since last note rather more discharge of pus than the apparently superficial extent of the wound would account for, but there were no signs of any active inflammation in the joint. Temperature had occasionally risen to 100°, but had generally been normal both night and morning. No constitutional disturbance whatever. The wound on the foot was practically healed except a few granulations.

Nov. 5th.—Much less discharge from wrist. The wound is nearly healed except in the centre, where there appears to be a sinus, leading probably to the joint. Temperature always normal.

19th.—A number of adhesions in the wrist-joint broken down by passive movement.

26th.—Wound on wrist now soundly healed. The patient has now fairly good movements at wrist, and can use fingers well. Foot healed, except a small superficial patch of healthy granulations.

The patient was seen a month after the last note, and had then almost entirely recovered the use of his hand and wrist, only slight muscular weakness remaining. No loss of sensation anywhere.

Removal of foreign body from the bladder by median lithotomy; recovery.—F. L——, aged forty-five, a coachman, was admitted on Nov. 17th, 1889. He stated that the day before admission he had passed a No. 8 black catheter, which he had been in the habit of doing every fortnight for the previous eight years, when he was in the Sussex County Hospital for stricture. On withdrawing the instrument he found that about one-third was missing. He has had no pain or difficulty in passing urine since, but says he "feels something at the neck of the bladder" occasionally during micturition. He is a healthy man; urine acid, 1010, no albumen.

Nov. 29th.—Under ether attempts were made to pass an instrument into the bladder, but without success, owing to the tightness of the stricture.

Dec. 1st.—Without an anæsthetic, attempts were again made to pass a small soft catheter, with no success. Patient had a slight rigor afterwards. Urine is passed fairly easily, notwithstanding the stricture, and continues to be clear and acid.

7th.—Under chloroform Mr. Furner again tried to pass a catheter, but failed. The urethra was therefore opened in front of the stricture on a Wheelhouse's staff, the stricture divided, and a grooved median lithotomy staff passed on into the bladder, and the bladder opened as in median lithotomy. Introducing the forefinger of the left hand, the foreign body was easily felt, and extracted with a pair of long straight forceps. A No. 10 red gum-elastic catheter was then passed per urethram into the bladder and tied in. The foreign body was found to be about three inches of a black No. 8 catheter, and was considerably encrusted with phosphates.

8th.—Patient was rather cold and slightly collapsed after the operation, but soon rallied with hot bottles &c. A good deal of blood-stained urine passed, chiefly through the catheter, but some through the wound. Slight ecchymosis around the wound. Temperature 99·4°; pulse 88. Tongue moist and clean.

17th.—A No. 12 catheter tied in. Urine now normal. No rise of temperature. Wound commencing to granulate.

21st.—Catheter is changed every third day. No urine has come through the wound for a week. Wound healing well. General health very good.

28th.—Catheter still kept tied in. Urine now becoming slightly ammoniacal for a fortnight; none has come through wound, which continues to heal. Temperature remains normal.

29th.—Last night the catheter became plugged with some slimy muco-pus, and was removed. Since removing it the patient has passed urine naturally, none coming through the wound. A No. 12 silver catheter passed easily; to be held in for a quarter of an hour.

Jan. 11th, 1890.—Patient now passes his urine quite easily and naturally, none ever coming through the wound, which is quite superficial. Urine again normal and acid. Patient up and about the ward daily.

16th.—Wound now quite soundly healed. A No. 12 coudée catheter passed daily.

27th.—Patient has learned to pass the catheter for himself. He left the hospital to-day.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Annual Meeting.

THE annual meeting of the above Society was held on March 1st, the President, Sir Edward Sieveking, in the chair. The new large meeting room in the Society's house in Hanover-square was used for the first time. The Report of the President and Council was read by the surgical secretary. It contained a sketch of the history of the removal of the Society from its old to its new home, and gave details of the manner in which the property had been acquired. The following societies have become tenants of the Royal Medical and Chirurgical Society:—The Pathological Society, the Clinical Society, the Royal Microscopical Society, the Gynæcological Society, the Obstetrical Society, the Quekett Club, the Society for Relief of Widows and Orphans of Medical Men, and the British Nurses' Association. The lighting is by electricity, a low-tension (100 volts) current being produced by a Kapp-Allen dynamo, worked by a six-horse power Robey's steam-engine. The electricity is stored in an accumulator of fifty-three cells. The arrangements for electric lighting had been kindly supervised by Mr. Clinton T. Dent. The Council wished to acknowledge the courtesy with which the Medical Society, through its President, offered the use of its rooms during October and November, and with which the Pathological and Clinical Societies deferred their first meetings, and kindly tolerated the temporary arrangements necessarily made for the first few meetings of the session. It was announced that a "Permanent Endowment Fund" had been started by a donation of £100 from Dr. Quain, to which £50 had been added by Mr. Edward Law Hussey of Oxford. The President had presented to the Society a

jewel, consisting of a copy in gold and enamel of the Society's seal, surmounted by a crown, to be worn as a badge of office by the President whenever he presided over or represented the Society. The total number of the Fellows was at present 793. Forty-three new Fellows had been elected, of whom 32 were resident and 11 non-resident; one Fellow had resigned and 17 Fellows had been lost by death. Owing to the fact that the whole of the books had been in store during the year, there was little to record as to the ordinary work of the library, but it was stated that the new house was capable of accommodating 200,000 volumes. During the past session a scientific committee had been appointed for the purpose of investigating questions of importance in reference to the climatology and balneology of Great Britain and Ireland. The council expressed in an emphatic manner their gratitude to Mr. J. Y. W. MacAlister, the resident librarian, for his unfailing energy and devotion to the interests of the Society.

The report of the treasurers was read by Mr. John Aston Bostock, and its adoption was moved by Sir William Savory, and seconded by Dr. Stephen Mackenzie.

Sir Edward Sieveking proposed, and Mr. Hulke seconded, a vote of thanks to the Building Committee, and especially to its Chairman, Mr. Timothy Holmes.

Dr. Julius Pollock moved, and Dr. Robert Lee seconded, a resolution altering the bye-law relating to the consideration of papers to be read before the Society. These resolutions were carried unanimously.

The PRESIDENT then read his annual address, which consisted chiefly of obituary notices of Fellows deceased during the year. He gave short and interesting accounts of the lives and work of Dr. W. H. O. Sankey, Dr. C. J. B. Williams, Professor Donders, Dr. C. B. Radcliffe, Dr. T. K. Chambers, Mr. W. J. Coulson, Dr. S. O. Habershon, Dr. C. Elam, Mr. H. H. Walton, Professor Volkmann, Mr. A. Shaw, Sir W. Gull, Dr. J. C. Fish, Dr. J. E. Currey, Dr. R. M'Donnell, and Dr. T. A. Wise. Referring to the progress of the Society, he stated that the Committee on Climatology and Balneology had already done much good work, and that another Committee on Suspended Animation had been talked of, but want of funds had prevented its appointment. He congratulated the Fellows of the Society on the choice of his successor and, as his last official act, invested Mr. Holmes with the new jewel of office.

Mr. TIMOTHY HOLMES, in acknowledging with gratitude his election, said he had almost thought his professional life was over, but when he was asked to occupy the proud position of President of that Society he could not refuse. He said he came into the chair finding a heavier burden resting on the Society than it had ever known before, and the most practical way of meeting this was to make strenuous endeavours to increase the number of Fellows.

Votes of thanks to retiring President, Vice-presidents, and Members of Council having been carried, the meeting adjourned.

The following is the list of officers elected to serve during the ensuing year:—President: Mr. T. Holmes. Vice-Presidents: Drs. R. Barnes, J. Langdon Down, and Messrs. A. Willett and J. Croft. Treasurers: Dr. C. J. Hare and Mr. J. A. Bostock. Hon. Secretaries: Dr. F. Taylor and Mr. J. Warrington Haward. Hon. Librarians: Dr. Samuel Jones Gee and Mr. John Whitaker Hulke. Other Members of Council: Drs. W. B. Cheadle, W. Miller Ord, A. Julius Pollock, G. Vivian Poore, T. Gilbart Smith, and Messrs. W. Harrison Cripps, C. T. Dent, H. G. Howse, H. W. Kiallmark, and H. W. Page.

PATHOLOGICAL SOCIETY OF LONDON.

Mammary Carcinoma in a Cat.—Prolapse into Duodenum of Wall of Stomach of a Horse.—Chronic Lateral Invagination of Colon with Cancer.—Diffuse Vesical Papilloma.—Loose Body from Knee-joint.—Necrosis and Separation of Articular Cartilage.

AN ordinary meeting of this Society was held on March 4th, the President, Dr. W. H. Dickinson, in the chair.

Mr. SPENCER showed the Mammary Glands of a Cat, all being affected with Carcinoma. The hinder glands were most diseased, and their place was taken by tumours from 1·5 to 4 centimetres in diameter, composed mainly of caseous material, but with some solid undegenerated portions at the periphery. Extension had taken place by the lymphatics passing up in front of the sternum, which were to be felt as indurated cords. These ended in glands in the root of the neck and in the anterior mediastinum, which had likewise become caseous. The lungs were studded with glistening semi-translucent nodules, from a pin-point to 2 millimetres in diameter, without any signs of degeneration. Emboli had reached the lungs through the thoracic and right lymphatic ducts and the pulmonary arteries. They had become arrested in the capillaries and had not extended further. The disease, which looked to the naked eye like tuberculosis, was found to be carcinoma resembling the human duct cancer. The degeneration in the mammary and lymphatic glands was seen in progress, and the shrivelled nuclei were still present after the cells had disappeared. The specimens came from an adult female cat, which had an irritating discharge from the nipples. The nipples were swollen and prominent, and the skin over the surface was red and excoriated, but there was no ulceration on the surface nor was the skin involved.

Mr. SPENCER likewise showed an instance of Prolapse of the Wall of the Stomach of a Horse into the Duodenum. The cardiac end of the stomach had become inverted, and the inversion had extended across the cavity of the stomach into the duodenum. The prolapse beyond the pylorus formed a sausage-shaped mass about one foot long by nine inches in circumference. It consisted of all the coats of the stomach, much thickened by congestion and inflammation. In the recent state it was black from congestion, but actual gangrene had not begun, except where the prolapse was tightly constricted by the pylorus. The rest of the stomach was normal. This condition had not been noted in man or animals either as a primary condition or secondary to a tumour, polypus, &c. It was produced by perverted peristaltic action, but the exceptional character of the condition precluded any conjecture as to why it occurred. Whilst the horse's stomach did not differ materially from man's, except in the intra-abdominal œsophagus, the animal hardly ever vomited except when the stomach was ruptured. There was no vomiting in this case. The specimen was taken from an aged pony, which was thought before death to be suffering from intestinal obstruction. It had been ill about a week. It could not swallow food or water, although it desired to do so. During the last three days it passed urine several times, but no fæces.

Dr. NORMAN DALTON related a case of Chronic Lateral Invagination of the Colon, following on a malignant growth. The patient, a man aged forty, was first seen in January, 1888, with symptoms of perityphlitis. The pain was entirely in the right iliac region, and no definite tumour could be felt in any part of the abdomen. He improved under treatment, but in May he began to have melæna, and, in September, he went into Guy's Hospital under Dr. Goodhart. The tumour in the left hypochondrium was then felt. He improved again and left Guy's Hospital; but he returned to King's College Hospital in August, 1889, and died there in October. The symptoms during the last year of his life consisted of a painful tumour in the left hypochondrium. The tumour was cylindrical and felt like a thickened piece of bowel, varying in size from two inches to four inches long. From time to time he became constipated, and then the tumour became larger and more painful. After constipation lasting for a day or two he would pass a motion (usually fluid, and freely mixed with blood), and then the tumour became smaller again and less painful. He never had symptoms of complete obstruction, and he lost flesh very slowly. Death occurred from rupture of the bowel into the retro-peritoneal connective tissue. The diagnosis was cancer of the bowel. In September, 1889, he was seen by Mr. Watson Cheyne, who recommended colotomy, with a view to subsequently removing the affected piece of bowel if possible. The specimen showed that nothing short of such an operation would have been of much use, but for various reasons it was not pressed on the patient. At the post-mortem the tumour was found to be a polypoid mass, lying inside the colon at about the splenic flexure. It was attached to the wall of the gut by two pedicles at about the same level. At the free end of the apparent polypus there was a small nodule of colloid cancer, but the greater part of the mass and both pedicles were found to be invaginations of all the coats of the bowel. There were no adhesions between the tumour and the anterior wall of the bowel, and there was a channel behind, between the pedicles, through which the fæces could pass. The explanation of these appearances seemed to be that

there was first a growth of cancer on the left side of the colon, and that this projected into the lumen until it touched the opposite side, to which it became adherent. Thus a bridge was formed across the bowel, and this bridge, being constantly thrust downwards by fæces, dragged on the intestinal wall on both sides until all its coats became invaginated. In this way the original base of the tumour on one side and the adhesion on the other became invaginations.—The PRESIDENT supposed there was no doubt that the cancerous growth was the primary change; he had seen intussusception produced by a polypoid growth. The almost entire absence of signs of obstruction was remarkable.—Mr. CROFT looked upon the specimen as an interesting contrast to those cases due to obstruction of the rectum by cancerous growths, the bowel above becoming pushed down and prolapsed. The explanation of the occurrence of ulceration in this case was the same as that seen in intussusception; the bowel pushed down, causing by pressure or otherwise ulceration of the wall of the gut below. He was convinced that the early formation of an artificial anus prolonged the life of the patient.—Dr. DALTON replied that the absence of obstruction was accounted for by the fact that there was plenty of room behind the tumour for the passage of fæces.

Mr. BOWLBY read notes of a case of Diffuse Papilloma of the Bladder. The patient was a man aged fifty-five, who had suffered from hæmaturia for a year. At first this was the only symptom, but for four months before death there had been renal pain and tenesmus, and for the last fortnight of life there was also some incontinence of urine. No growth could be felt per rectum or with a sound, but the bladder felt rough. The patient when first seen was too ill to bear any operation, and died nine days after admission into St. Bartholomew's Hospital from suppurative nephritis. On post-mortem examination the bladder was found to be much enlarged and to contain some purulent, blood-stained ammoniacal urine. Its mucous coat was covered with phosphates, and when these were removed a thick villous growth was displayed. Almost the entire mucous surface of the organ was covered by a dense shaggy mass which completely replaced the normal lining. The growth was white, and was formed by innumerable slender villous processes more than an inch in length and frequently branched. These covered all the inner surface of the bladder except a small portion of the fundus, where the mucous membrane seemed perfectly healthy. A very noticeable feature was that the muscular coats were nowhere infiltrated, although they were hypertrophied. There were no enlarged glands or secondary growths. Microscopical examination showed that the tumour was a papilloma, and that it contained no sarcomatous or carcinomatous elements. The papillæ were branched and covered with many layers of small, round, and oval epithelial cells.—Mr. BARWELL asked how long before death the sounding took place, and whether any papillomatous filaments were found in the urine.—Mr. SPENCER had recently seen a case of diffuse papilloma, in which the growths were successfully removed with a curette.—Mr. TARGETT brought a specimen from Guy's Hospital museum showing a like condition. He said that the presence of villi did not determine the innocence of malignancy of the growth. It had been said that the first change was a lateral budding from the vessels of the mucous membrane.—Mr. PYE referred to a case which on examination seemed like a meadow sown all over with papillary growths; it was treated by opening the bladder above the pubes and removing the growth with the nail. Three years had elapsed but no recurrence had taken place.—Mr. ROUGHTON also related an instance of successful removal of diffuse papilloma with the finger-nail, and referred to a specimen in the museum of St. Mary's Hospital where the growth involved principally the base of the bladder.—Mr. LUNN had operated a year ago on an old man of seventy-five by the supra-pubic method. The growth was easily removed by the finger, and the patient was still in good health.—The PRESIDENT asked if the urine had been examined microscopically. He referred to a case in which a papilloma became totally detached from the vesical wall, was thickly coated with phosphates, and became practically converted into a calculus.—Mr. BOWLBY, in reply, said that no fragments of growth were detected in the urine microscopically, the bladder was much contracted and simply felt rough to the sound. In a large number of cases the papillomatous growths occurred in discrete masses with healthy mucous membrane between; such an arrangement might suggest the likelihood of return after operation, but this was not found to be the case.

Mr. H. B. ROBINSON brought forward a case of Quiet Necrosis of Articular Cartilage, causing a Loose Body in Knee-joint. This had been removed by Mr. Croft from a boy aged seventeen, who six days before, when lifting a heavy weight, had felt something give way in his right knee. This was followed by synovitis and difficulty in walking, so that he applied for admission to the hospital two days later. There was very little pain, and no history of a blow or of any previous trouble with the knee, or of any specific fever. As the synovitis appeared to be due to the loose body this was removed. Ordinary synovial fluid escaped from the joint. There was no irregularity felt about the condyles. The loose body measured one inch and one-sixteenth in length, five-eighths of an inch in breadth, and a quarter of an inch in thickness. It had a smooth, glistening convex surface, like normal articular cartilage, except for a small strip at one border, which was made up of tough ligamentous tissue. Its concave surface was irregular, and pitted, and a few gritty nodules could be felt scattered over it. There were no spicules of bone to be seen attached to this deep surface. The edges of the body sloped from the concave to the convex surface; they were irregular, showing small grooves over which the most superficial layers of the cartilage projected. Microscopically the deep surface was found to be very irregular, and the cartilage cells were undergoing multiplication in patches just above this surface. Calcification was present around these groups of cartilage cells, extending into the matrix, which elsewhere was homogeneous. There was no appearance of any bone formation in the sections. It was evident from the appearance of the body that it owed its origin to the articular cartilage. From its shape and from the ligamentous piece it seemed to have been attached to the posterior part of one of the condyles abutting on the intercondylar notch. The question was whether it had been detached by injury or quiet necrosis. Against a traumatic origin was the excavated condition of its under surface and edges and the calcification taking place in its deepest layers. Although the body appeared to have been detached by "quiet necrosis" or "necrosis without suppuration," there was no cause for such detachment. There was no history of any specific fever or of previous injury. It must be supposed, however, that from some slight injury which the boy had not noticed a chronic inflammatory process had been set up beneath the cartilage, which had led to its gradual separation and shedding into the joint.—Mr. BARWELL said the mode of origin which had been described was rare. The cartilage did not come away from the bone pure and simple, but as a rule the articular lamella as a whole or in part remained adherent to the cartilage and came away with it. The process was in reality an inflammatory one in the subjacent bone. He removed a loose cartilage from the knee-joint of a medical man, which was quite free and extremely heavy; in structure it resembled the ivory exostoses formed about the face.—Mr. CROFT saw no reason to suppose that this was a new growth; it was not a portion of synovial fringe, nor was it a rheumatoid nodule. If it were classed under the head of quiet necrosis, that would not define the cause or exclude a traumatic origin. It was possible that the patient had received an injury, for he was a football player. He was at first disposed to look on it as an instance of acute traumatic separation.

Dr. GRIFFITHS (Cambridge) then gave an account of the Minute Structure of Loose Bodies in Joints, and traced the formation of the common variety—namely, that derived from the synovial membrane. He referred to Kölliker's description of the vascular tufts on the synovial membrane near the articular cartilages in the knee-joint, and suggested that they were really the results of some passing inflammation in the joint rather than normal vascular villi, because he could not find any similar structures in the same situation in the fœtus at birth. He also compared and pointed out the histological differences between the common variety and the much rarer one, the result of immediate separation of a piece of articular cartilage and its subjacent bone. He also referred to a specimen of necrosis of a piece of the articular cartilage on the external condyle of the femur, in which the dead piece of cartilage was in the process of becoming separated from the surrounding living and healthy tissues.

The following card specimens were shown:—

Mr. ROBINSON: Cavernous Angioma of Leg.

Mr. LUNN: (1) Myxœdema of Larynx; (2) Tumour of

Larynx; (3) Ulceration and Perichondritis of Thyroid Cartilage.

Mr. BIDWELL: Double Ureter.

Mr. SHATTOCK: Triple Ureter.

Dr. SIBLEY: (1) Retroflexion of Uterus in a Monkey; (2) Specimens of a Tapeworm from a Python.

Mr. TARGETT: Sarcoma of Tongue.

Dr. LEDIARD (Carlisle): Loose Cartilages in Bursa behind Knee-joint.

Recent specimen:—Mr. LEOPOLD HUDSON: Retro-renal Lipoma from a Fox-terrier Bitch.

CLINICAL SOCIETY OF LONDON.

Glandular Tumour of Tongue.—Cheyne-Stokes Breathing in Granular Kidney.—Intravenous Injection in Diabetic Coma.—Acute Universal Dermatitis.

AN ordinary meeting of this Society was held on Feb. 28th, the President (Mr. Christopher Heath) in the chair.

Mr. BUTLIN related two cases of Glandular Tumour of the Tongue. He gave an account of two female patients who had been under his care on account of a prominent tumour of the back of the tongue, immediately in front of the epiglottis. The tumour, in the first case, was about as large as a hen's egg. It was shelled out, after division of the mucous membrane, with a finger and a scoop. Examination showed it to be a glandular tumour, containing cysts. The removal was not complete. Recurrence took place, but as the recurrent tumour did not thrive, there had been no necessity for a further operation. In the second case the growth was not so large. It was removed with the galvano-cautery, and exhibited the same structure as the tumour in the first case. In this case, again, the removal was not complete. But the patient had been seen lately, several months after the operation, and there appeared no need for further treatment. The author referred to all other cases of the same character which had been found in surgical literature; showed how they had all occurred in females, had (with one exception) precisely the same seat in front of the epiglottis, and presented the same structure. Two points of special interest were commented on. The success of partial operations, as illustrated not only by the present cases but by a case which was treated by Mr. Rushton Parker more than ten years ago. As to the origin of the growths, it was probably, as suggested by Dr. Bernays and Mr. Bland Sutton, fœtal. The microscopic structure was not that of the normal glands situated beneath the mucous membrane at the back of the tongue, but resembled very closely that of the thyroid gland.—The PRESIDENT said that the tendency with some was to call every tumour of the tongue malignant. The careful account given of these cases should encourage surgeons to make a diligent examination of every doubtful instance.—Mr. BOWLBY thought that the appearance of these tumours, one of which was situated to one side of the middle line, negatived the idea of their thyroid structure. The fluid in one of the cysts was thin and slightly sticky, and was not colloid in nature. Microscopically, tubes were found lined by short columnar cells, whereas tumours resembling the thyroid gland contained no tubes. He thought they originated in the tubular glands at the back of the tongue, and had no connexion either with fœtal structures or with the thyroid gland.—Mr. BUTLIN said that Dr. George Stoker had met with two other cases, one of which he had destroyed by the thermo-cautery. He pointed out that when an ordinary thyroid cyst enlarged, the contained fluid was usually thin, and could be drawn off by a cannula. Both the growths he had described were situated in the middle line.

Dr. SAMUEL WEST read notes of a case of Cheyne-Stokes Breathing in the course of a case of Granular Kidney of three months' duration. The patient, a man fifty-three years of age, with a history of gout occasionally, had been suffering from shortness of breath for eighteen months, especially after exertion. Six months before admission he was suddenly seized with very severe dyspnœa at night, so that he thought he was going to die. After half an hour he rallied, but he had two similar attacks in the course of a month, and then remained well until three weeks ago, when the worst attack of all occurred, since which time his breathing remained short. He had a pale, sallow, earthy complexion, with tortuous and thickened arteries, and a pulse of high tension. Pulse 104; respiration 48. The heart was not manifestly hypertrophied, and there was no murmur. The urine was of low specific gravity, 1010, and contained about one-sixteenth of albumen. The retina was natural. The case was diagnosed as one of weak heart resulting from granular kidney. A few days later Cheyne-Stokes breathing developed. The respiration was 48 in the minute. The cycles occurred about once a minute and the pause lasted thirty seconds. There was no change in pulse, or pupil, or in appearance during the pauses. If asked to take a breath during the pause, he attempted to do so, but succeeded only in setting in action some of the extra-respiratory muscles, the common ones—viz., the diaphragm and intercostal muscles remaining fixed. For fourteen days the Cheyne-Stokes breathing was continued night and day. Then the pauses disappeared and the general character of respiration was to crescendo and diminuendo. A week later the place of the pause was taken by intermission, about two or four respirations being missed. The heart was at the time observed to be gradually dilating and the apex was about the nipple; no systolic murmur was audible at the apex. A few days later the Cheyne-Stokes breathing, which had been absent for fourteen days, returned. After lasting twenty days, the pauses again disappeared. This condition lasted for four days, and then was replaced by Cheyne-Stokes breathing, which remained present thenceforth until the patient's death. The cycles occurred over a minute, the pauses lasted from twenty to twenty-five seconds, and the respirations numbered about forty. For two days a ravenous insatiable appetite developed, and then almost completely failed. The patient died after having been under observation three months, but no post-mortem could be obtained. The temperature was normal throughout. The points of interest were: (1) The long duration of the Cheyne-Stokes breathing; (2) the replacement of the pauses by simple intermission; and (3) the disappearance of the pauses while the rise and fall of the respirations continued. Tracings had been obtained and were exhibited.—Dr. CHARLTON BASTIAN said that old writers had remarked on the association of Cheyne-Stokes respiration with fatty degeneration of the heart, but he had seen no such cases; he had observed it in connexion with cerebral lesion. It might be, he supposed, produced by the blood poisoning associated with renal disease.—Dr. STEPHEN MACKENZIE had attended an elderly relative aged eighty, with dilated heart, granular kidneys, and a little albuminuria, who showed signs of intermittent Cheyne-Stokes breathing for two months. He observed that at the commencement of the series of ascending respiratory acts a distinct movement of the arms towards the head took place. He had seen many cases in connexion with cerebral disease, and he possessed a good chest tracing from a case of hemiplegia with diminished movement of one side of the chest. He had seen two patients recently in whom during the apnœic period a distinct convulsive seizure took place; one had between 150 and 200 such fits in twenty-four hours. He asked if anyone had seen a case of Cheyne-Stokes breathing apart from injury of the head which had recovered.—Dr. WEST, in reply, said that the cases of Cheyne-Stokes respiration in association with fatty heart were easier to study than those associated with brain lesion. He thought it dangerous to lay much stress on convulsive movements in cases of unconsciousness. Oscillatory changes in the pupils were observed in other conditions, such as tubercular meningitis. One or two cases of recovery were on record, and in one a probably false diagnosis of tubercular meningitis was made.

Dr. DICKINSON then gave the details of a case of Diabetic Coma in which injection of saline fluid into the veins was practised. The patient was a woman aged twenty-five, who was the subject of diabetes in a severe form, upon which coma with the usual diabetic character had recently succeeded. The fluid employed was that made use of in cholera, consisting of chloride of sodium, chloride of potassium, sulphate of soda, phosphate of soda, and bicarbonate of soda dissolved in water. This was slowly injected by means of a syringe, first into the right arm and then into the left, until in the course of an hour and a half 106 ounces had been introduced. There was no immediate improvement, nor did the patient seem any worse. About ten minutes after the conclusion of the operation, however, consciousness began to return, and soon became so complete that the patient was able to converse with her friends, and take food in a natural manner. But she relapsed into drowsiness, and then into coma, and next day was very comatose, as much as before the operation. The injection was now

repeated into one of the veins of the leg, into which the fluid was allowed to flow from an elevated funnel. A little chloroform had to be given during the exposure of the vein. Under the operation the aspect of the patient improved; the features became less pinched, the complexion less livid, and the pulse gained in volume; with these encouragements the injection was continued until increasing fulness of the superficial veins and some general appearance of congestion were taken as indications to stop. There was as yet no return of consciousness, in the hope of which the proceeding had been continued. It was now found that no less than 350 ounces, or seventeen imperial pints and a half, had passed in. This was a much larger quantity than had been intended, but the process was allowed to go on under the encouragement which the former attempt seemed to afford, and in the absence of prohibitive symptoms, until the increasing congestion was thus interpreted. After the conclusion of the injection the patient remained unconscious for about three-quarters of an hour, then recovered complete consciousness, and retained it without drowsiness for nine hours, after which she became at times drowsy, but was for the most part sensible for thirty hours, after which there was a lapse into coma which was final and fatal. The protraction of consciousness after the second operation being longer than after the first might possibly have been partly due to the chloroform, though but little had been given. After the operation the turgescence of the veins gradually ceased, and a little œdema appeared over the tibiæ. Urine of low specific gravity (1012), which contained 1·8 per cent. of sugar, was passed freely. It gave no acetone reaction, though this had before been strongly marked. The bowels were loose, but not extravagantly so; the skin, which before had been dry, was moist, but not sweating. The heart's sounds were feeble, there was no murmur either in it or the great vessels. The acetone smell in the breath was still perceptible, though much less so than before. Within the space of thirty-two hours 456 ounces, more than twenty-two imperial pints, had been introduced into the veins. Five days before the injection the patient had been found to weigh eighty-one pounds and a half; after death the body weighed ninety-three pounds, the gain being no doubt of water. On examining the body post mortem much superficial blood staining, along the course of the superficial veins, and some œdema were observable. The peritoneum contained eighteen ounces of straw-coloured fluid, the pleuræ twelve ounces, and the pericardium one ounce of blood-tinged fluid. The heart was small but healthy, its cavities blood-stained. The lower lobes of both lungs were loaded with blood, and besprinkled with punctiform extravasations. The spleen was firm, dark, and full of blood; it weighed eight ounces. The kidneys were full of blood and blood-stained. The brain was much congested, the veins loaded, the pia mater injected. The ventricles contained about half an ounce of blood-coloured fluid. The results of the examination could be summed up as venous engorgement and fluidity of blood. The hopelessness of diabetic coma under ordinary treatment was held to justify, or at least to excuse, treatment which was exceptional. The first injection, 106 ounces, appeared to be wholly beneficial; the result suggested only a wish that it had been more. As to the second, 350 ounces, the postponement of the expected benefit led to its being carried beyond the region of therapeutics into that of pathology; not only was consciousness restored, but morbid venous congestion produced. The delay in the return of consciousness in both instances suggested that the benefit was due rather to elimination than hydration. It was clear that 100 ounces could be introduced with advantage, and probably twice that quantity, but the results were not such as to promise more than temporary benefit. As a practical and safe conclusion, it was suggested that the free drinking of water should be enforced before diabetic coma had established itself in cases where it was anticipated.—Dr. STEPHEN MACKENZIE said that many physicians had employed saline injections in diabetes. At the discussion at the Pathological Society some time ago there was a concurrence of opinion that the blood was thick and black; he himself had never seen it of the laky tint which was said to be produced by the presence of acetone. The injections he had employed were much smaller in quantity than those used by Dr. Dickinson; he thought that if he used a larger amount, though short of the enormous quantity employed in the case related, and extended its administration over a greater length of time, the method might prove more successful.—Dr. BERNARD O'CONNOR asked, in view of the symptoms which followed the third injection, how much chloroform had been administered.—Mr. TURNER referred to a case of coma associated with glycosuria which had been under his observation. The patient had received an injury to his head in Egypt; glycosuria developed, and he became all but comatose, with stertorous breathing and fixed equal pupils. He was treated by free purgation, he regained consciousness, and was at present alive and well, the glycosuria having disappeared. In Dr. Dickinson's case the veins were very shrunken, and he had a great difficulty in getting the cannula into the exposed saphenous vessel.—Dr. S. WEST asked if any changes in the urine were noticed after the injection, and whether the acetone reaction were still present.—Dr. DICKINSON, in reply, said that the blood was usually gummy and dark in diabetes, and this condition had suggested to him the feasibility of trying the effect of dilution by water. A very small quantity of chloroform was administered, but its amount was not measured. He had never known a case of diabetic coma unassociated with traumatism recover. He had thought that purgatives kept off, and that opium helped on, an attack of coma; but he had tried all sorts of things, such as inhalation of oxygen, during its progress without result. The acetone reaction had disappeared from the urine after the injection, but there was still a slight acetone smell in the breath.

Dr. PYE-SMITH brought forward a case of Universal Dermatitis, apparently due to the administration of chloral-amide. The patient, a man aged forty, suffering from aneurysm, was prescribed, among other hypnotics, chloral-amide in full dose, and with apparently good effect. Soon after acute inflammation appeared on the face, with coryza, stomatitis, and raised temperature; this rapidly spread over the whole body, the urine was febrile and slightly albuminous, and pyrexia continued for a week. Profuse desquamation followed, resembling that of exfoliative dermatitis, and the skin finally resumed its normal appearance. Drawings illustrating the case were shown.—Dr. HALE WHITE had found no record of such a result of the administration of this drug. The dose of eighty grains was larger than that usually given; sixty grains were generally considered the maximum dose.—Dr. PYE-SMITH, in reply, said that he gave two doses of forty grains: one at eight in the evening, the other at four the next morning.

MEDICAL SOCIETY OF LONDON.

Annual Meeting.—Operation on Fistula in Phthisis.

THE annual meeting of the Medical Society was held on March 3rd, the President, Dr. C. Theodore Williams, in the chair. The business of the general meeting was first proceeded with. The Honorary Secretary read the report of the Council. It appeared from it that forty-one new Fellows had been elected, and one former Fellow had been reinstated. The Society at present consisted of 613 ordinary or subscribing Fellows, 44 non-subscribing Fellows, 38 honorary and 30 corresponding Fellows, making a total of 725. One corresponding Fellow had been elected, and the Society had conferred the honorary Fellowship on Professor Holmgren of Upsala, Professor Kocher of Bern, Dr. Lombard of Geneva, M. Pasteur of Paris, and Dr. Tommasi Crudeli of Rome. During the year four honorary and four ordinary Fellows had died, and three had resigned. The Council, looking at the length and importance of the papers and the completeness of the reports of the discussions, had decided on issuing the Proceedings for the future under the title of Transactions. The President had generously given £100 to be expended in whatever way the Council decided would best conduce to the comfort and convenience of the meetings of the Fellows. The report of the Treasurer was then read, and showed a satisfactory balance. The Honorary Librarian reported that eighty-three new volumes had been added to the library, and recently a donation of 200 volumes and reports had been received from the Sanitary Institute. The whole of the publications previously to 1700 had been catalogued, and the rooms were increasingly used by Fellows of the Society. The report of the Fothergillian Fund was then received, and the subject of the essay for March, 1892, was announced as "Pernicious Anæmia."

An ordinary meeting of the Society was then held, and

Mr. HERBERT ALLINGHAM read a paper on the question of Operation on Fistula in Phthisis. He referred to the

little information to be obtained on the subject in medical books, and to the contradictory nature of the recommendations. He made exceptions, however, of the opinions set forth in their respective books by the President (Dr. Theodore Williams) and by Dr. Douglas Powell. He then spoke of the disadvantages arising from the common practice of the surgeon or of the physician arriving at an opinion as to the desirability of operating without consulting with his *confrère;* and he next proceeded to enumerate the peculiarities that marked off fistula in phthisical patients from ordinary traumatic fistula. Mr. Allingham suggested that from an operative point of view fistula in phthisical patients might be divided into three classes: (1) fistula in conjunction with active tuberculosis; (2) fistula in conjunction with chronic phthisis; and (3) strumous fistula. These three kinds were then described, and the proper treatment in each was tersely set forth. In the author's opinion, in the second and the third class judicious active treatment was most advisable. Mr. Allingham then referred to the importance of choosing a good time and place for operating, discountenancing active treatment when the cough was troublesome, and remarked that it was not wise to keep the patient too long in a recumbent position. He also mentioned the preferability of chloroform to ether as the anæsthetic to be employed, and insisted on the circumstance that a phthisical patient, on learning that he was also affected with fistula, was liable to great despondency, and hence to an aggravation of the chest mischief.

The PRESIDENT gave it as his opinion that any discharge in a case of phthisis, if not excessive, did good to the lung. For instance, he had seen disease of the knee-joint or necrosis of a bone produce diminution of the cough, and give decided relief to the pulmonary symptoms. In strumous phthisis the chances of the patient might be measured by the fact that one or more of his organs beside the lung were involved. He would advise operation on fistula if its condition were such as to worry the patient or irritate the system. He referred to a case of acute phthisis in which the disease was spreading, when a fistula formed, and this was followed by an immediate retrogression of the physical signs. The patient was able to continue at his work for four years, and at the end of that time the fistula had healed completely. Two months later an extensive ingravescence of the pulmonary disease took place, and the patient rapidly succumbed. He had seen many other cases in which the lung symptoms had become more marked after the fistulæ, which had been discharging, had healed up.

Mr. SHEILD said that with the many conflicting opinions that had been expressed it was hard to lay down rules for the guidance of the operating surgeon, and the cases presented so much variation among themselves that it was almost impossible to classify them under any definite headings. The opinion of most physicians seemed to be that it was advisable to operate only when the fistula gave very great inconvenience to the patient. He had been struck with the frequent association of tubercular fistula with extensive ulceration of the coats of the rectum; in treating these fistulæ they should not only be laid open, but be well scraped and dressed with iodoform from the bottom. He referred to the ancient practice of counter-irritation by seton, which was said to do much good, as supporting the view of the beneficial action of fistula.

Mr. HARRISON CRIPPS said that in every hundred cases of fistula he had found from ten to fifteen affected with phthisis. He believed that fistula was always the result of abscess, and that these latter might be caused either by a condition of general debility or by ulceration and infection with bacillus of tubercle. As to treatment, he agreed that no universal rule could be adopted. If there was an extensive fistula with active lung mischief he did not advise operation unless there were pain, when the opening leading to the abscess might be enlarged. If the fistula were associated with chronic lung disease, a careful operation would be followed by healing as readily as in healthy patients. He believed that many cases where the fistula ceased to discharge were not instances of cure, but simply of stopping up of the external opening of the abscess. For an anæsthetic, chloroform was to be preferred.

Dr. JOHN LOWE had been chary of touching fistulæ in phthisical patients; many of them after operation developed symptoms of septicæmia, and the incisions rarely healed. He had obtained great success in such cases by the application of the continuous ligature.

Mr. TAYLOR had looked up the statistics of the Brompton Hospital, and had found that of 8000 cases of phthisis only 4 per cent. of them suffered from fistula, and another more recent series of cases only gave 1 per cent. As a rule they caused the patient but little trouble, and in such cases it was better not to operate. He much doubted if the healing of a fistula hastened the progress of lung disease; certainly the removal of a diseased limb in phthisis often did good; and, in the same way, so should the cure of a fistula. He was unable to collect specimens illustrating the commencement of fistula in ulceration of the rectum.

The PRESIDENT, commenting on Mr. Cripps's remarks, said that in all the cases he had quoted in which the fistula had healed there was an obvious increase in the pulmonary physical signs.

Mr. ALLINGHAM, in reply, said he had abandoned the ligature because the fistulæ had almost always more than one sinus, and unless all were laid open they would not heal. The small percentage quoted by Mr. Taylor might be accounted for by the fact that the patients did not mention their rectal complaint because it gave them so little trouble. He had known of several cases in which the lung trouble had been benefited by operation.

The following is the list of officers elected to serve during the ensuing year:—President: Mr. J. Knowsley Thornton. Vice-Presidents: Dr. T. Gilbart Smith, Mr. J. Astley Bloxam, Dr. Stephen Mackenzie, and Mr. Reginald Harrison. Treasurer: Mr. A. E. Durham. Librarian: Dr. W. H. Allchin. Honorary Secretaries: Mr. C. A. Ballance and Dr. T. Colcott Fox. Honorary Secretary for Foreign Correspondence: Dr. Jean Samuel Keser. Council: Sir William Roberts, F.R.S., Drs. T. D. Acland, R. Barnes, C. E. Beevor, C. D. F. Phillips, A. E. Sansom, G. H. Savage, Felix Semon, C. T. Williams, and T. Outterson Wood, and Messrs. H. W. Allingham, J. Black, Alban Doran, J. H. Drew, W. F. Haslam (Birmingham), C. B. Keetley, Edmund Owen, Bernard Pitts, W. Rose, and A. Marmaduke Sheild.

HARVEIAN SOCIETY.

Multiple Exostoses.—Disintegration of the Urinary Organs.—Surgical Sequelæ of Fevers.

AN ordinary meeting of the Society was held on Feb. 20th, Thomas Bryant, Esq., President, in the chair.

Mr. JACOBSON showed a case of Multiple Exostoses occurring upon the thighs, tibiæ, and scapula of a girl aged fourteen years.—The President, Mr. John Morgan, and Mr. D'Arcy Power took part in a discussion upon the various points of interest raised by the case.

Mr. D'ARCY POWER showed a specimen of Complete Disintegration of the Urinary Organs following upon a long-standing phimosis.—Mr. J. Morgan and the President made remarks upon the clinical interest of the preparation.

Mr. JACOBSON then read a paper on the Surgical Sequelæ and Complications of Fevers, more especially those met with in Typhoid Fever. The author thought that diseases of the periosteum and bones were not of very rare occurrence after an attack of typhoid fever. In his own experience the ribs had been more frequently attacked than the bones of the lower extremity. He considered that the causes were various, the chief perhaps being thrombosis, enfeebled nutrition, weakened periosteum due to a strumous taint, or, where the disease ensued long after defervescence, some muscular strain. In obstinate cases the treatment should not be of too expectant a nature. Amongst diseases of the joints, dislocations and ankylosis were the most common. Phlebitis and its consequences, too, he had frequently met with, and he narrated several interesting cases. Gangrene was of importance, especially when it affected the genital organs, for it might easily be overlooked or mistaken in its earlier stages for other diseases. Pleuritic effusions following upon typhoid fever were remarkable for the insidiousness of their onset and for their liability to suppurate. Abscesses were of three kinds: those which were superficial and were akin to boils, those which were glandular, and those which started in hæmatomata. Laryngeal troubles were of disputed frequency, and Mr. Jacobson believed that they occurred more often in some epidemics than in others. Parotiditis was of interest not only on its own account, but because, as Mr. Stephen Paget had shown, it might be associated with any form of abdominal lesion. Orchitis was said by Hanot and other French observers to be a complication of typhoid fever, but Mr. Jacobson had

not yet met with any case.—Dr. SIDNEY PHILLIPS alluded especially to the complications of typhoid fever. At the London Fever Hospital he had seen cases of periostitis of the tibiæ both in men and women, and he thought that periostitis of these bones were of more common occurrence than periostitis of the ribs. Bedsores he considered to be a much less common sequela than it was formerly, a change which he attributed to the improvement which had taken place in modern nursing. He narrated an interesting case of a fatal outbreak of typhoid fever occurring amongst some dairy farmers who had eaten the flesh of pigs which had died of swine fever. One of the patients had cancrum oris. He had recently seen three cases of laryngeal trouble, one occurring in an out-patient, and all in male adults. He believed that cystitis and vesical hæmaturia were also sequelæ of typhoid fever, and that their cause was too often overlooked.—After an attack of typhoid fever, Dr. BLAKE suffered from phlebitis, with symptoms of angina. He asked Mr. Jacobson whether he had met with such a complication.—Mr. CRIPPS LAWRENCE thought that such constitutional conditions as struma and rickets might predispose to thrombosis, and in this view he had the cordial support of Mr. Jacobson.—Mr. MORGAN thought that "quiet dislocations" were not uncommon as a result of fevers, and he narrated cases in which such dislocations had occurred after measles and acute rheumatism.—Dr. GOODHART had seen two cases of plugging of the venæ cavæ, due to typhoid fever. He considered that such thrombosis might perhaps be explained by assuming that typhoid deposits occurred in the vascular system just as they were known to occur in the kidneys, where they gave rise to a peculiar form of albuminuria. He explained the frequent association of measles and joint disease by saying that severe measles was a very bad fever, and left the patient in a very low condition and a suitable nidus for germs.—The PRESIDENT believed that many of the sequelæ of fevers, such as abscesses, were due to thromboses of the deep veins; acting upon this assumption it had long been his practice in cases of incipient gangrene of the genital organs to direct the nurse to move the scrotum, or gently to massage the vulva two or three times a day, to prevent stagnation of the blood. Any great necrosis of bone was rare in typhoid fever unless there had been osteitis.—Mr. JACOBSON replied, and the meeting adjourned.

EPIDEMIOLOGICAL SOCIETY.

WEDNESDAY, FEB. 12TH.

SIR THOS. CRAWFORD, K.C.B., M.D., LL.D., PRESIDENT, IN THE CHAIR.

Malta Fever.—SURGEON GIPPS, R.N., read a paper on Malta Fever, which he maintained was a specific disease generated by the foul condition of the harbour. It was most prevalent in the hotter months, when putrefaction was active, the cases reported in July being ten times as numerous as those in January, and probably even more so, many being returned as remittent. The crews of H.M.s vessels, anchored for six months in the year, suffered far more than the garrison, and the disease, when occurring among the troops, was mostly contracted in crossing the water. It was, he held, quite distinct from the remittents common to other parts of the Mediterranean, the contrary statements of some being based on the erroneous diagnosis of ill-educated Levantine practitioners. It never appeared elsewhere except on board vessels recently stationed at Malta, and within the incubation period of fourteen days, and, as Surgeon Bruce had shown from observations on twelve fatal cases, a micrococcus, differing from any found in malarial fevers, and totally so from the bacillus of typhoid, was abundantly present in the viscera, and cultivations of it in agar-agar induced the disease when inoculated in a monkey. (Microscopical specimens of these were exhibited.) He deprecated the term "typho-malarial," as there were no intestinal lesions or any intermittent features. It set in with malaise, headache, severe lumbar pains, fever, the temperature rising from 101° on the first day to 104° or upwards with a daily range of 2° or 3°, perhaps bilious vomiting and diarrhœa. But constipation soon followed, and the symptoms abated except the fever, headache, and constipation, with sleeplessness—perhaps nocturnal delirium—complete anorexia, and consequent emaciation and anæmia, both of which might be extreme. The tongue was moist throughout, and covered with a thick yellow fur. The duration of the fever varied from a few weeks to several months, but when begun recovery was rapid, and was much assisted by the removal to England or a similar climate. The mortality did not exceed 2 per cent., but in some cases death occurred within the first week; in these the enlargement of the liver and spleen would be found excessive. There were no very characteristic complications, the most troublesome being a quasi-rheumatic affection of the muscles, of the lumbo-sacral nerves, and of the periosteum, especially around the tibia. These tended to spontaneous cure; drugs were comparatively useless, but they speedily yielded to treatment at one of the German baths. In the treatment of the fever itself no good was effected by aconite, salicylates, &c., and quinine did positive harm. Sleeplessness was to be met with chloral, bromides, or sulphonal, and when the fever was high and the skin dry a few full doses of antifebrin were of great value; twenty grains every half hour till the temperature fell; the diarrhœa did not call for interference, the constipation being relieved by enemata. The diet demanded the utmost attention, relapses being easily induced by any indiscretion in that direction. In the discussion that followed, Director-General Dick, R.N., Dr. Preston, R.N., and Surgeon W. E. Home, R.N., took part; the former doubted the essential difference described by the author as existing between this and other fevers of the Mediterranean, and the last advocated the treatment adopted by Sir Jos. Fayrer, of large doses of sulphate of soda for relieving the congestion of the liver and of paracentesis of the sheath of the sciatic nerve in cases of acute and prolonged pain. Mr. Home also maintained that strychnine had a very beneficial influence on the intensity and duration of the fever.

MIDLAND MEDICAL SOCIETY.

WEDNESDAY, JAN. 22ND.

MR. LAWSON TAIT, F.R.C.S., PRESIDENT, IN THE CHAIR.

Syphilitic Epiphysitis.—Dr. SUCKLING showed an infant a few weeks old with a syphilitic rash on the face and buttocks, and with a hard swelling at the lower end of each humerus. The swelling was exquisitely tender when the child was first seen, and the child cried when either upper extremity was touched. The rash and swellings had much diminished under the administration of hyd. c. creta, a grain twice a day being given. Dr. Suckling stated that he frequently met with such cases at the Children's Hospital, but he could not obtain any history of injury, and he fully believed the epiphysitis was purely syphilitic. In the majority of cases the lesion was one-sided, and the lower epiphysis of the humerus was the one most commonly affected. Recovery almost invariably followed the administration of mercury in sufficient doses, and prolonged for some weeks.

Right Hemiplegia and Aphemia due to Syphilis.—Dr. SUCKLING showed a young man, aged twenty-seven, who was affected with severe right hemiplegia with late rigidity and contracture. There was well-marked ankle clonus on the right side. The patient was quite speechless, or at least wordless. He understood everything said to him, and appeared quite rational. He had had syphilis, and his hemiplegia supervened upon severe nocturnal headaches. Dr. Suckling dwelt upon the great importance of recognising cerebral syphilis in an early stage. Several varieties might be recognised. In one form hemiplegia follows apoplectiform attacks and the patient recovers, but if not treated the paralysis ultimately becomes permanent. In another form the hemiplegia follows attacks of Jacksonian epilepsy, and is due to gummatous mischief in the motor area of the cortex; this form is easily recognised, and is amenable to prompt and vigorous treatment. In another form the hemiplegia supervenes suddenly with or without aphasia, is often not preceded by nocturna headache, and is severe and followed by severe rigidity. This form is due to thrombosis in an artery diseased from syphilis, and is quite unaffected by treatment. Dr. Suckling considered that his patient was suffering from the last-mentioned variety.

Double Sessile Embedded Ovarian Cysts.—Mr. JORDAN LLOYD showed two cysts which he had removed by abdominal section from a married patient twenty-eight years of age, and which had given rise to frequently recurring attacks of retention of urine during nearly two years. Both

cysts lay between the layers of the broad ligament, the one on the right side containing nearly three pints of perfectly clear fluid, and that on the left about one pint. Both were sessile and buried in the pelvis, completely blocking up the space; each was removed by incising the broad ligament and enucleation. The woman made a rapid and complete recovery. From the inner side of each cyst a curious process like the finger of a glove ran horizontally inwards towards the uterus, and their external ends tore away and could not be shelled out like the rest of the cyst wall. This points to the cyst being developed from the parovarium, and not originating as simple cysts of the broad ligament.

Cyst of Broad Ligament.—Mr. JOHN W. TAYLOR showed a large cyst of the broad ligament which he had removed by enucleation from a patient at the Women's Hospital a few weeks previously, the patient making a good recovery. Mr. Taylor remarked on the difficulty of exactly deciding whether such cysts were parovarian in origin or not; while embedded cysts, distinct from the ovary and possessing a glove-finger-like prolongation, or containing papillary growths, might with considerable confidence be classed as "parovarian"; other cysts, distinct from the ovary, should preferably be described as cysts of the broad ligament.

Dr. RATCLIFFE showed a specimen of Meckel's Diverticulum that had caused a fatal obstruction.

Mr. BARLING read notes of a case of Epithelioma of Pharynx and Larynx.

Dr. SHORT read notes of a fatal case of Phosphorus Poisoning.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

THURSDAY, FEB. 27TH.

C. N. GWYNNE, M.D., PRESIDENT, IN THE CHAIR.

Diffuse Symmetrical Scleroderma.—Dr. SIDNEY ROBERTS showed a patient suffering from this malady, affecting the feet and legs only. He was a moulder by trade, aged seventy-two. The disease began in June, 1889, above the left ankle, and spread gradually upwards and downwards. The right leg was not affected until three or four months later. At first the legs were swollen and hard, but not œdematous. When shown, the infiltration of the left leg had been replaced by atrophy of the tissues, and the same change was occurring in the right leg. In both the skin was firmly adherent to the parts beneath, so that it could not be pinched up or moved over the subcutaneous tissue. It was very hard, dry, smooth, devoid of hairs, and of a dirty appearance, with fawn-coloured mottling. Both legs were symmetrically affected as far as the knees, but no distinct line of demarcation was visible. The patient was unable to extend the left knee fully, owing to the rigidity of the skin; the ankles were fixed, and the toes only slightly mobile. His general health was good, and his chief complaint was of a boring pain and intolerable itching in his hide-bound legs, which interfered with sleep. There was no anæsthesia. The condition of the skin and the itching had improved under ferruginous tonics and friction with oily substances.

Graves' Disease.—Dr. GWYNNE read notes of a case of Graves' disease where death had occurred suddenly. The patient, an unmarried woman aged thirty-four, first sought relief for general debility, chronic diarrhœa, and headache. The catamenia had been irregular for some months. Six months later she again presented herself, and then for the first time the enlargement of the thyroid gland was discovered, accompanied by some protrusion of the eyes. The pulse was very rapid, and there was marked general nervousness, twitching of the facial muscles, and working of the fingers. She said she had only noticed the goitre for about two or three months. The case rapidly got worse, and the protrusion of the eyes became most marked, the eyelids hardly covering the sclerotic when she endeavoured to close them. The pulse-rate averaged from 120 to 130 per minute. Both lateral lobes of the thyroid were enlarged to about the size of a small hen's egg; the middle lobe was little enlarged. There was no marked anæmia, no albuminuria or glycosuria, but the diarrhœa was frequent in its recurrence. There was no sign of disease in the lungs or heart. There was no pigmentation of the skin. About six months after she had first noticed the enlargement in the neck, while sitting up in bed to take some milk, she fell back and expired. The pulse for some days previously had been 140, and she had been ordered to bed. The treatment of the case had been of little avail to relieve symptoms. Digitalis, bromide of potassium, cod-liver oil, and the iodide of potassium ointment externally to the neck had been the principal drugs used.

Hypnotism.—Dr. EDWIN GOODALL read a paper on this subject. Dealing briefly, in the first place, with the history of the subject from those early periods when it was wrapped in mystery to the times of Mesmer and his followers, he then referred to the work of Braid, of the Salpêtrière and Nancy schools, and of Heidenhain. The modes of production of hypnosis were then described, and the fact that they had been invested with undue importance by interested public exhibitors insisted on, although in Dr. Goodall's opinion the personal factor of the operator counted for something. The symptoms of hypnosis were next considered, and the different degrees of depth of the state were referred to. Attention was also called to the condition of the muscles, senses, respiration, circulation, and memory in profound hypnosis. The three fundamental states of Charcot, as seen in hystero-epileptics, were then depicted and the methods of their production described. The slighter degrees of hypnosies were considered, and an outline given of what is commonly witnessed. The effects of suggestion were detailed under the headings of hallucinations, delusions, movements, paralysis; and experiments were described to prove that objects suggested were seen under the same conditions as others actually in the environment. "Imitative automatism" was described, and examples given of "automatism at command." Reference was made to the apparent spontaneity of suggested acts performed in the waking state, with allusion to the interest attaching thereto in regard to the doctrine of free will. Theoretical considerations found brief mention; catalepsy and somnambulism were referred to as instances of different phases which must be correlated with different cerebral states, the behaviour in the former being opposed to that in the latter. The views of Jendrassik in regard to a diminished "association activity" of the brain were given as helping to explain the amenability to suggestion. Finally, the practical outcome of the study of hypnotism was considered, its services to psychology and physiology, its use as a therapeutic agent, the production of anæsthesia for operative ends, its value in the cure of insomnia, headache, tippling habits, functional paralysis, amenorrhœa, and refusal of food (in Germany and France). In conclusion, Dr. Goodall hoped that in the future hypnotism might be entrusted entirely to the physician.—Mr. Snell, Dr. Arthur Hall, Dr. Sinclair White, Mr. Pye Smith, Dr. Gwynne, and Dr. Sidney Roberts took part in the discussion.

ROYAL ACADEMY OF MEDICINE IN IRELAND

A MEETING of the Medical Section was held on Jan. 24th.

Angina Pectoris in the Heart Palsy of Acute Specific Infective Disease.—Dr. J. W. MOORE read a paper on this subject. The object of the paper was to bring under notice a cause of "breast-pang," or angina pectoris, which seemed not to have attracted that attention to which it was entitled—namely, the cardiac paralysis due to acute infective diseases, especially to diphtheria. Within the past year three notable cases of heart failure in infective disease came under the author's observation. Of these the first and third were diphtheria cases, and the second a case of septicæmia. In the second and third anginal symptoms were present in an extreme degree. The anginal attacks of acute infective disease often answered Dr. Byrom Bramwell's definition of true angina pectoris—namely, "a neurotic affection characterised by paroxysms of intense pain in the region of the heart, and a terrible sense of impending death." These seizures of angina in infective disease appeared to arise from deficient innervation, granular fatty degeneration of the heart, or from a sudden increase of tension in the peripheral arteries—the angina pectoris vaso-motoria of Nothnagel; causes which operated singly might combine so as to determine an anginal attack. In angina from infective diseases, the most useful therapeutical measures were the administration of alcoholic and diffusible stimulants, and the application of hot poultices over the heart and of mustard epithems to the extremities. In granular degeneration, heart tonics and stimulants, such as nux vomica and strychnine, arsenic, digitalis, convallaria, and strophanthus,

were given; and in vaso-motor angina the spirit of nitrous ether, nitrite of amyl, nitro-glycerine, as well as iodide of ethyl and similar remedies, should be administered.—Dr. A. W. FOOT observed that it was contrary to experience to find the disease, save in rare cases, in females and children. Heberden had noted, as a rare instance, the disease in a boy aged twelve; and Sir John Forbes, out of eighty-eight cases, did not find one in a child. Therefore he contended that the existence of the disease in a child of three years of age should be established on very certain clinical data.—The PRESIDENT having also spoken, Dr. J. W. MOORE, in reply, said it was idle to deny that angina pectoris occurred in females. Angina pectoris was not an essentially isolated disease at all, but was the term applied to a group of symptoms which might be present in convalescence or in acute infective disease; and it was open to any observer to add to the recognised cases.

A Remarkable Case of Intestinal Obstruction. — Dr. WALLACE BEATTY read a paper describing the case of a boy who came under his care on Jan. 16th, 1889, having been ill for four days. The illness commenced suddenly with severe abdominal pain, chiefly referred to the region of the cæcum. In a few hours vomiting occurred, but lasted only one day; diarrhœa in moderate amount set in also. When Dr. Beatty saw him there were abdominal pain of moderate severity and tenderness on pressure over the right iliac fossa; the pulse was weak and the tongue furred, with a temperature of 99°, which during nineteen days did not exceed 101°. On the nineteenth day a change in the symptoms occurred, consisting of paroxysms of severe abdominal pain, vomiting, distension of the abdomen, and obstinate constipation. Obstruction of the bowels had set in and lasted for thirty-two days, yielding suddenly on the fiftieth day from the commencement of the illness. Dr. Wallace Beatty was assisted by Sir William Stokes in the conduct of the case. They considered the case to be one of typhlitis, producing paralysis of the bowel, and so leading to intestinal obstruction.—Sir WILLIAM STOKES, who had been consulted in the case, said on more than one occasion operative surgical interference had been seriously discussed, but he persistently opposed that course. He did not think it a case of intussusception, but one of typhlitis, and that the paralytic condition which brought about the obstruction was due to localised inflammation. The indications in support of his view were, first, the early febrile disturbance, and, secondly, the absence (notwithstanding Treves' dictum) of shock, collapse, diminution of temperature, and failure of the pulse, which in every case of intussusception were present. On the other hand, the early diarrhœa contraindicated typhlitis. In that condition of things, and believing that it was not a case of purely mechanical obstruction, he knew that to open the boy's abdomen would militate against a successful result. Indeed, he did not think there was a single instance recorded in Dublin of a successful result obtained by laparotomy for the relief of acute intestinal obstruction in a child. However, this would not have deterred him from operating if he had been sure of dealing with mechanical obstruction.—Dr. FOOT was of opinion that the case was one of general, diffuse, subacute peritonitis.—Drs. MACAN, T. W. MOORE, ATTHILL, and ORMSBY having made some remarks, Dr. WALLACE BEATTY replied, and said he concurred with Sir Wm. Stokes in objecting to an operation.

Reviews and Notices of Books.

Essays upon Heredity and Kindred Biological Problems. By Dr. AUGUST WEISMANN, Professor in the University of Freiburg. Translated by ED. POULTON, SELMAR SCHÖNLAND, and ARTHUR SHIPLEY. Oxford: Clarendon Press. 1889.

THE volume before us includes eight essays or memoirs, all dealing with heredity or with subjects closely connected with it. They are in order: The Duration of Life; Heredity; Life and Death; the Continuity of the Germ Plasm as the Foundation of a Theory of Heredity; the Significance of Sexual Reproduction in the Theory of Natural Selection; on the Number of Polar Bodies and their Significance in Heredity; on the Supposed Botanical Proofs of the Transmission of Acquired Characters; and, lastly, the Supposed Transmission of Mutilations. These essays, the author informs us, though appearing together in a single volume, were not written upon any prearranged plan, but have been published at various intervals during the last seven years. They all deal more or less directly with the mode in which hereditary characters are perpetuated.

The explanation of the fact that a mass of protoplasm not exceeding one-hundredth of an inch in diameter is capable, after fusion with another mass of still smaller magnitude, of developing into an organism which shall closely resemble in form, in size, in structure, and in action the parent organism from which it proceeded, has continuously excited the interest of physiologists since it became known from the experiments of Redi and of Spallazani and of Harvey that the axiom, "Omne vivum ex ovo," was at least true for all the higher animals. In former times it was held that the organs of the future animal were contained in the germ, and even Cuvier considered the doctrine of *emboîtement des germes* advanced by Bonet to be the most reasonable of all the theories of germation. The progress of microscopical research has, however, gradually thrown this doctrine into the shade, and of late we see in the "Pangenesis" of Darwin a revival, as Professor Weismann remarks, of the oldest theory of heredity, that of Democritus, according to which the sperm is secreted from all parts of the body of both sexes during copulation, and is animated by a bodily force. A disposition to adopt a similar explanation is seen in the theory advanced by Maupertius in the last century, and supported by Buffon, which was to the effect that the several molecules composing the fertilised ovum are endowed with a kind of elective attraction in virtue of which they attract and unite with each other in such a manner as to form masses analogous to those from which they spring—resembling in a remote way the mode in which the molecules of a salt in solution unite with other similar molecules to form a crystal. In all such views it is taken for granted that every part of the material of which the fertilised ovum consists, contains particles capable of developing into each part of the body of the offspring; but the doctrine that is now sought to be established by Professor Weismann is founded upon the idea that a substance to which he applies the name "germ plasm," possessing a highly complex structure, is transferred from one generation to another; and he explains heredity by supposing that in the development of each individual a part of the specific germ plasm contained in the parent egg-cell is *not* used up in the construction of the body of the offspring, but is reserved unchanged for the formation of the germ cells of the following generation. The difficulty which immediately suggests itself is the extraordinary minuteness to which the subdivision of the unchanged germ-plasm must have attained in the course of several hundred generations, not to say thousands or millions. This difficulty is to some extent met by the calculations of Thomson and others on the number of atoms and of molecules that exist in a very minute mass of matter. Nägeli, for example, has shown that even in so small a space as the one-thousandth of a cubic millimetre 400,000,000 of micellæ may be present, each consisting of a group of molecules. The germ plasma Dr. Weismann considers to be that part of a germ cell of which the chemical and physical properties, including the molecular structure, enable the cell to become, under appropriate conditions, a new individual of the same species, and this part is the nucleus. From his researches on the hydroids, he concludes that the germ plasm is present in these animals in a very finely divided, and therefore invisible, state in certain somatic cells from the very beginning of embryonic development, and that it is then transmitted through innumerable cell generations to those remote individuals of the colony in which sexual products are

formed. The germ plasm is continuous with, and as a rule is derived from, a parent germ cell. It may, however, exist in minute quantity in the somatic cells of an animal or plant, which affords an explanation of the growth and complete development of even so complex a plant as the Begonia from a leaf placed on moist sand, where it is to be supposed that, instead of the germ plasm being aggregated to form the pollen grain and the ovule, it is distributed in minute quantities through the cells of the leaf. Dr. Weismann has an interesting section on the causes of hereditary individual differences, which he attributes to the amphigonic or sexual mode of reproduction, by which the great majority of existing organisms are propagated. Such method of reproduction consists in the coalescence of two distinct germ cells, or perhaps only of their nuclei. The germ plasm, owing to its specific molecular structure, is the bearer of the hereditary tendencies of the organism from which the germ cell is derived. Hence, in amphigonic reproduction, two groups of hereditary tendencies are, as it were, combined, and this combination he regards as the cause of hereditary individual characters. "We do not know," he goes on to say, "the number of generations over which the specific hereditary tendencies of the first generation can make themselves felt, but many facts seem to indicate that the number is large, and it is, at all events, greater than six; and when we remember that, in the tenth generation, a single germ contains 1024 different germ plasms, with their inherent hereditary tendencies, it is quite clear that continued sexual production can never lead to the reappearance of exactly the same combination, but that new ones must always arise." We strongly recommend the perusal of this work to those of our readers who are interested in biology, as containing many observations of great interest, and many suggestions, the truth or incorrectness of which can only be determined by the work of many men, extending over a long period of time.

A Practical Treatise on Nervous Exhaustion. By G. M. BEARD, A.M., M.D. Edited, with notes and additions, by A. D. ROCKWELL, A.M., M.D. London: H. K. Lewis.

THERE are few conditions which cause such misery to the victims as the one under consideration, which may be regarded as the direct outcome of the high pressure at which scientific, literary, and commercial work are carried on at the present day. In our own country cases of it are only too abundant, and in America, where work appears to be carried on at even higher pressure, the affection is still more widespread. The book under consideration is now reissued, after the author's death. It is to him that we owe the term "neurasthenia," which is often as convenient a cloak as the adjective "functional." Since 1868, when Dr. Beard described cases, and gave them this name, it has been very widely and equally loosely employed. At that time also the authors proposed the system of treatment by excess of food, particularly of fatty food, with rubbing and general faradisation, which, modified by Weir Mitchell and known by his name, is so much in vogue in the treatment of this class of cases at the present day. We hoped therefore to find in the present work the result of their twenty years' experience, arranged and treated in a scientific manner, so as to form the basis of further work by other observers. We must confess that our hopes were not realised. The Section on the Symptoms of Neurasthenia occupies eighty pages. It is diffuse, wordy, and without any attempt at scientific arrangement. As many symptoms as possible are dignified by Greek words, frequently much distorted, as the author confesses, "for euphony's sake." Those persons who are terrified during a thunderstorm will be comforted to know that this is "astro-phobia," although they may be surprised to learn that the leading symptoms of this disease (*sic*) are "pain and numbness in the back of the head, vomiting and diarrhœa and in some cases convulsions!" In the chapter on Diagnosis, most of the affections that are liable to be confounded or associated with neurasthenia are mentioned, but very little useful information is given as to how they are to be discriminated. As to treatment, the authors advise that each case should be treated on its merits, some with sedatives such as bromides, others with tonics. They raise a warning voice against the too common abuse of chloral, opium, and alcoholic stimulants in these cases. In addition to good feeding, general faradisation and also central galvanisation are recommended. In the latter the current is applied directly to the skull by means of a wire helmet connected with the positive pole, the negative being placed on a distant part of the body. Care must be taken that the current does not exceed twenty milliampères, and that the current is never suddenly broken.

Although the book contains a large amount of useful information, it contains more that is loose and inaccurate, and it will not take a high place in the literature of nervous diseases.

On Diseases of the Rectum and Anus, including the Third Edition of the Jacksonian Prize Essay on Cancer. By HARRISON CRIPPS, F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, &c. Second Edition. London: J. & A. Churchill. 1890.

Cancer of the Rectum, especially considered with regard to its Surgical Treatment. Jacksonian Prize Essay. By HARRISON CRIPPS, F.R.C.S. Third Edition. London: J. & A. Churchill. 1890.

THE second and smaller of these two volumes—the Jacksonian Prize Essay—is included in the larger work, and forms, indeed, its largest and most important part. For this edition some of this essay has been rewritten, and in particular the question of diagnosis is discussed more fully, and the operation of inguinal colotomy is described and recommended. Naturally Mr. Cripps is able to speak more confidently about the value of excision of the rectum for malignant disease, for time has both added to the cases in which he has practised it, and has allowed him to follow to the end the course of his earlier cases. His opinion of this operation is distinctly favourable, provided it is restricted to well-selected cases. He is an ardent advocate of colotomy, and his statistics show that this operation may be attended with a very small mortality. So strongly is he in favour of the inguinal operation, that he does not even describe the lumbar method, and speaks of it as obsolete. His mode of performing it is slightly different from that advocated by Mr. Allingham. Like other surgeons, he lays stress upon the importance of opening the highest part of the sigmoid flexure that can be brought into the inguinal wound as being the chief safeguard against prolapse.

The operation for hæmorrhoids favoured by Mr. Cripps is the old-fashioned ligature, but we do not gather that this preference has been arrived at after an extended trial of the rival measures of the clamp and cautery and excision of the hæmorrhoidal ring. The volumes contain some interesting pathological speculations of the author, and some admirable drawings of microscopical preparations. Among omissions we notice no statement of the duration of rectal cancer, a point on which Mr. Roger Williams has given some valuable data; and in the account of Congenital Sacro-coccygeal Tumours there is no reference to the morphological view which would group them among dermoid tumours as thyroid dermoids connected with the post-anal gut.

OUR LIBRARY TABLE.

Scientific Memoirs by the Medical Officers of the Army of India. Edited by Sir BENJAMIN SIMPSON, M.D., K.C.I.E., Surgeon-General with the Government of India. Part IV. Calcutta: Printed by the Superintendent of Government Printing, India. 1889.—There are two papers in this volume which are of general interest. Surgeon-Major Cunningham gives a negative answer to the question which forms the title of one of these—viz., "Are choleraic comma bacilli, even granting that they are the proximate cause of choleraic symptoms, really efficient in determining the epidemic diffusion of cholera?" His paper opens with an account of experiments to determine the length of time that the bacilli can retain their vitality in water and soil, which was found to be less than in pure cultivations. It is pointed out that on Koch's hypothesis an antecedent state of the alimentary canal is essential to the infection by comma bacilli, and therefore such a condition must be epidemic also. Even if, with Hueppe, the formation of arthrospores from the bacilli be admitted (and they have been observed only in exceptional circumstances), yet experiment goes to show that they do not flourish in water or soil under normal conditions. In fine, Dr. Cunningham considers that the main factor in the epidemic diffusion of cholera is to be found in the local conditions, and that the comma bacilli play only a secondary part. No contagionist theory will, he says, account for this epidemic diffusion, and this being so, there is hope that local sanitation may, although adopted without reference to cholera, play the chief part in prophylaxis, which quarantine is unable to do. In another paper, Surgeon L. A. Waddell studies the remarkable fact that venomous snakes are not toxic to themselves. As a result of several experiments, he confirms the principle formulated by Fontana in regard to viper venom—viz., "that the venom ..... is neither a poison to the snake itself nor to those of its own species." Mr. Waddell also found that the venom is in many instances also inoperative on snakes of other species, but innocent snakes were susceptible. Experiments were also made with cobra venom on cold-blooded animals. The hypothesis advanced to explain the immunity of venomous snakes to snake poison is ingenious. It is to the effect that "it is acquired by frequent imbibition of small quantities of the venom on the modified or attennated form which the venom assumes when mixed with salivary and gastric juices, and absorbed through the alimentary canal." The remaining papers in the volume are Notes on the Life History of Ravenilia sessilis, B., and Ravenilia stictica, B. and Br., by Dr. Cunningham, and one on the Life History of a New Cæoma on Smilax aspera (Linn.), by A. Barclay, M.B. These papers are excellently illustrated.

Casuistique et Diagnostique Photographique des Maladies de la Peau. By Dr. D. VAN HAREN NOMAN. 4to. London: H. Renshaw. 1889.—This is Part I. of a photographic atlas of diseases of the skin, which is to be completed in ten parts, each containing six plates with nine photographs. They have all been taken by the author himself from cases in his clinique in the Faculty of Medicine of Amsterdam, where he is the Professor of Dermatology and Syphilography. They are reproduced by phototype, and are uncoloured. They are excellent examples of the service which modern photography can render to dermatology; and although colour is oftentimes indispensable to give a complete representation of some skin diseases, there are many in which an accurate delineation of the form, detail, arrangement of the elementary lesions, and the general distribution on the skin, even without colour, leaves so little to the imagination that anyone with a slight knowledge of the disease can, by reading the description, complete the picture in his mind without difficulty. What photography can and cannot do is well exemplified in the present number, which contains representations of several phases of psoriasis, multiple gangrene of the skin, and herpes zoster. Anyone acquainted with a typical case of psoriasis can easily, with the aid of these plates, picture to his mind the various forms of this disease here presented. The delineation of herpes zoster is not so happy. It shows well, of course, the distribution of the eruption; but the vesicular character of the individual lesions could not be inferred from the photograph, the difficulty arising partly from the lack of colour, partly from the necessarily great reduction in size of what were originally only small lesions. The plate labelled "Psoriasis vulgaris universalis" appears to represent what in England would be called pityriasis rubra, originating in a psoriasis. The text is in French, and in it the disease is considered as regards its synonyms, the relation of the case depicted, the general symptomatology, and the diagnosis. The descriptions appear to be clear, accurate, and sufficient for a work of this kind, and the diagnosis is set forth with great care and elaborateness in parallel columns. Judging from the part before us, which reflects credit on both author and publisher, we shall look forward to the other parts, and hope to find them as well executed as the present.

Examination of Water for Sanitary and Technical Purposes. By HENRY LEFFMANN, M.D., Ph.D., Professor of Chemistry in the Woman's Medical College of Pennsylvania, &c., and WILLIAM BEAM, M.A., Demonstrator of Chemistry in the Pennsylvania College of Dental Surgery, &c. Philadelphia: P. Blakiston, Son, and Co. 1889.—This is a well-compiled and useful little treatise. To call it a compilation is to pay it a compliment, for any attempt at originalty in so well-worn a field would have diminished instead of adding to the practical utility of the book. Most of the more common methods for water analysis are described clearly, though briefly, and several which are not common, as, for example, the recently proposed iron process and the pyrogallol process for the determination of dissolved oxygen. Of these the authors speak well. The importance of the determination of dissolved oxygen in water is very frequently overlooked, but it must not be forgotten that water absorbs oxygen with very great velocity, and that no determinations have any value at all unless the most elaborate precautions for the exclusion of air have been taken. It is noteworthy that several well-known and approved methods are, no doubt intentionally, omitted. Such processes as that of Frankland and Armstrong could hardly have been included without greatly increasing the bulk of the volume; but, on the other hand, their absence greatly detracts from its value.

Die Krankheiten der Frauen. Von Dr. H. FRITSCH. 4te Auflage. Berlin, 1889.—The fourth edition of a work does not require an extended notice; what is principally required is that it should be corrected up to date. We cannot say that this desideratum is here fulfilled; for instance, the old and exploded notions about displacements appear without qualification, and such a chapter as that on "Inversion of the Uterus" is most unsatisfactory. It is surprising to see but one English name in the bibliography of this section, the author having never apparently heard of the work of West and Tyler Smith, and being ignorant of the best methods of treatment. Throughout the book hardly any but Germans are quoted. This may gratify the pride of German students, but it is indeed a strange proof of national complacency.

The Quarterly Journal of Microscopical Science. Edited by

Professors RAY LANKESTER, E. KLEIN, and ADAM SEDGWICK. No. CXX. (February). London: J. & A. Churchill. 1890.—The following memoirs are contained in this part: The Anatomy of the Madreporaria, by G. Herbert Fowler; the Anatomy of Earthworms, by Frank E. Beddard; the Phagocytes of the Alimentary Canal, by Armand Ruffer; the Hydroid Phase of Limnocodium Sowerbyi, by H. Fowler; note on Organs Resembling Touch Corpuscles in the Intra-muscular Connective Tissue of the Skate, by George Carrington Purvis; note on the Transformation of Ciliated into Stratified Squamous Epithelium as a Result of Friction, by John Berry Haycraft and E. W. Carlier; the Development of the Ear and Accessory Organs in the Frog, by Francis Velly; a Description of Thelaceros Rhizophoræ, a New Actinian from Celebes, by P. Chalmers Mitchell; notes on the Genus Monstrilla, by Gilbert C. Bourne; and, lastly, on the Maturation of the Ovum and the Early Stages in the Development of Allopora, by Sydney Hickson. Each contribution has a plate.

Handbooks of Monthly Nursing: Handbook of Obstetric Nursing. By F. W. N. HAULTAIN, M.D., and J. H. FERGUSON, M.D. Pentland. 1889.—*Lectures on Obstetric Nursing.* By THEOPHILUS PARVIN, M.D. Philadelphia: Blakiston. 1889. London: Lewis. 1890.—The above little books have both merit in their way. We think, however, that the audience to which they are addressed should be carefully chosen and adhered to, and that a book for monthly nurses should not be the same as for pupil midwives. The former is really a short manual of midwifery, and not of nursing, and shares the inevitable fate of books which attempt too much in a short space. It is, however, fairly correct in most points. The latter work deals largely with the moral duties of nurses, which rather crowd out more practical matters.

Le Dragon Rouge: a Short Story. By FRANCIS VACHER. Griffith, Farran, Okeden, and Welsh. 1889.—To inquire into the motives which have given rise to this little book from the pen of a surgeon would be futile. To attempt to judge it by ordinary standards would be unkind. To indicate the morals which the author says "lie on the surface" would be to rob the reader of a certain speculative interest which is not devoid of charm. It will probably suffice to say that the author has woven together various threads of love, sorrow, mystery, and remorse, and has succeeded in producing a slight short story upon unconventional lines. The æsthetic paper, choice printing, and strange binding will be attractive to many minds.

THE GENERAL INFIRMARY, LEEDS. — A highly favourable report was presented at the annual meeting, held on the 26th ult. There had been a large increase of both in- and out-patients during the year. The income, from all sources, was £20,345 5*s.* 6*d.* (a considerable addition on the previous year), and the expenditure was £18,295 9*s.* 9*d.* The extension of the infirmary will shortly be proceeded with, and of the £30,000 promised to the extension fund, about £25,000 has already been received.

EYE INFIRMARY, BATH.—The annual report, the seventy-eighth, of this institution states that the new premises opened in September last will accommodate fifteen in-patients, with room for more if the necessity should arise. The growing demand for the benefits of the infirmary is shown by the increase of patients. The additional number of in-patients during the year was 98, and of out-patients 237. The committee acknowledge the receipt of £270 17*s* towards replacing the sum of £1500 withdrawn from capital for the purchase of the new house, and its adaptation to the purposes of the infirmary. The total income was £558 18*s.* 5*d.*, and the expenditure £475 18*s.*, leaving £83 0*s.* 5*d.* of the ordinary income in hand.

THE ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary comitia of the College of Physicians was held on the 1st inst., the President, Sir Andrew Clark, in the chair. It was resolved to adopt a suggestion made by Sir E. H. Sieveking, that a copy of Harvey's works and of the College Roll, together with other volumes, be presented to the University of Toronto, which had recently lost its valuable library by fire.

A communication from Sir W. C. Gull was read, thanking the College for the resolution passed at the last comitia and the appointment of a deputation to attend the funeral of the late Sir W. Gull.

Communications were read from the Foreign Office respecting English medical practitioners in France, and the President pointed out that the proposals of the French Government were favourable to those English practitioners who resided in health resorts and confined their practice to their own countrymen.

The following resolutions, recommended by delegates of the two Colleges, in reference to the action of the General Medical Council on the subject of registration of diplomas in State Medicine, were proposed by the Emeritus Registrar, seconded by Dr. Norman Moore, and opposed by Drs. Wilks and Quain. The resolutions were carried by a considerable majority.

"1. That the Colleges have noticed the unprecedented course taken by the General Medical Council in dictating to the licensing bodies the conditions on which the diplomas in State Medicine are to be granted in order that they may 'deserve recognition in the Medical Register,' and having obtained from high legal authorities the opinion that the course in question is not justified by the terms of Section 21 of the Medical Act, 1886, they place on record their disapproval of the action taken by the General Medical Council. 2. The Colleges, however, being of opinion that there is no prospect of any opportunity arising for a repetition of the proceedings of the General Medical Council in question, and therefore of the present action being quoted as a precedent, and being, moreover, of opinion that the proposed conditions of study and examination are in themselves unobjectionable, consider that it is undesirable to take further action."

Reports from the Committee on the Extension of the Examination Hall Buildings, and from the Laboratories Committee, having reference to the lighting of the buildings and the fitting up of the laboratories, were adopted.

The report from the University of London Committee was then discussed. The report explained the nature of the scheme put forward by the Senate of the University of London, and expressed the opinion that "the details of the scheme referring to education and educational bodies appeared likely to do much to promote academical feeling and to bring about that association of teachers with examinations, and with the regulation of courses of study which has long been wanted in London." The most important part of the report was the recommendation as a basis of discussion with the Royal College of Surgeons of the following: "That in order to co-operate with the University in the granting of pass degrees in medicine, the College would consider it necessary that the University should accept the final examination of this College in the case of any candidate who in other respects has followed the course laid down by the University." It was explained that this proposal was based on the supposition that it was intended to institute two classes of medical degrees—Pass and Honours. If accepted, the College would be willing to accept assessors or additional examiners appointed by the University, with a conjoint board to report on the curriculum and examinations, and to be willing that the President should be an *ex-officio* member of the Senate. The committee further recommended that it was desirable to substitute elementary biology for elementary physiology in the first examination of the present Examining Board; to transfer materia medica and therapeutics to the final examination, which should also include questions in pathology. The report was adopted on the motion of Sir Risdon Bennett, seconded by Dr. Allchin, after a discussion shared in by Drs. Quain, Matthews Duncan, Sansom, Bristowe, Barnes, Mac Alister, and Pye-Smith.

THE LANCET.

LONDON: SATURDAY, MARCH 8, 1890.

SINCE the last election of Councillors at the College, which resulted in favour of three candidates who, to say the least, are not enthusiastic on the subject of reform, a temporary cessation of open hostility to collegiate government has ensued; the Association of Fellows has, however, been active, meanwhile, in reconsidering its position, and in formulating its future aims, prior to approaching the Council of the College on the subject of increasing the rights and privileges of Fellows.

The Members' Association has been, and is indeed now, keenly advocating the claims of Members of the College both in the law courts and in Parliament. So it is evident that much dissatisfaction is still felt on the part of both Fellows and Members with their treatment by the Council. It is therefore premature to indulge any unwarranted sense of relief that the fight is over; nor can the Council of the College yet hope to enjoy immunity from further attack. During recent years the College Council has certainly summoned annually *one* meeting of Fellows and Members. On such occasions Fellows and Members meet indiscriminately, the report of the College proceedings is taken as read, probably one or more jealously guarded resolutions are moved in addition, and a vote is taken conjointly by Fellows and Members, which practically proves to be a mere expression of opinion. It would now seem that the Association of Fellows, while willing to abide by its compact with the Members' Association, desires to keep a free hand in its efforts, and in its recent account of its proceedings[1] advises a reversion to its original articles, and its first programme, which is designed to increase the power, privileges, and status of the Fellows of the College. From the point of view of the Fellows, a glance at the comparative constitutional value of the Fellowship of the Royal College of Surgeons of England and of the sister Colleges will show abundant cause for dissatisfaction. Taking the Royal Colleges of Physicians of London and Edinburgh, and the King and Queen's College of Physicians, Ireland, the Royal Colleges of Surgeons of Edinburgh and Ireland, and the Faculty of Physicians and Surgeons of Glasgow, we find in all of them that the Fellows actually or virtually control the affairs and policy of the Colleges by means of annual, quarterly, or monthly meetings of the Fellows, and that the whole or greater part of the Councils is elected annually by the Fellows. At the Royal College of Surgeons of England the Fellows as a rule elect only three Councillors per annum, and they have no similar right of meeting in the College. On being summoned to their College by the President at an annual meeting their conceded right is "Vox et præterea nihil." The legitimate aim of all Fellows must be to alter this, and to bring the management and control of the Council into harmony with a just recognition of their rightful claims.

The Association of Fellows especially urges the shortening of the tenure of office of Councillors from eight to four years. It maintains that the Fellows should obtain the right of meeting in their College and have a common room; that meetings of Fellows should be formally convened from time to time upon due notice being given to all Fellows; that the Fellows assembled under the presidency of a chairman elected by themselves should be able to represent to the Council their opinion by resolution; that the Fellows should have the power to appoint a deputation from their number to confer with the Council, and to elect Committees to inquire into any matters pertaining to collegiate policy, to collegiate affairs, and to surgical practice, with power to report thereon to the meetings of Fellows. In our opinion, such changes are but reasonable, and in consonance with everyday collegiate experience. The autocratic tenure of power in the hands of any Council, however excellent, is vexatious. The action taken by the Association of Fellows is both legitimate and politic, and is, we think, a course likely to obtain favour with Fellows generally; if unanimity, or a near approach to it, be secured on the part of the Fellows, no Council can resist the force of the united opinion of such an enlightened constituency.

But while the Fellows of the College are reasonably advocating their claims, we cannot fail to sympathise with and cordially support the Members, who are making for the same point by a different route. In the present state of public and professional feeling no reform can be accepted as satisfactory which does not make greater concessions to the Members of the College. In our own time, by mutual forbearance, the various grades of society find it possible to be reconciled, and work together for the common good. The same reciprocity must be exhibited between the Fellows and Members; each, on their own ground, must contribute to the well-being and prosperity of their joint College, the maintenance of its honour, and the further extension of its usefulness.

AT last our War Minister appears to have realised the necessity for providing healthy accommodation for the troops, and the importance of doing so on a suitable scale. In the House of Commons on the 28th ult., Mr. STANHOPE made a detailed statement of his views on the subject, and foreshadowed the measures he proposes to adopt. His description of the state of the barracks and huts at some of the most important military stations not only justifies the course he is about to take, but reflects great discredit upon the authorities who have allowed them to lapse into their present disgraceful condition. At Aldershot "the roofs of the huts, which were thirty-five years old, were flattening down, and the lower frames were rotten. More than 500 had to be propped up." At Shorncliffe camp "the huts were not wind nor water tight, and some quarters were scarcely habitable at all." At Woolwich the huts of the standing camp, built thirty years ago, were in a most discreditable condition, the woodwork being so rotten that the stables had to be propped up; and at Colchester the condition of the camp "was not altogether what could be desired."

[1] The pamphlet may be obtained of Messrs. Waterlow and Sons, London-wall.

As regards barracks, the defects of those at Dublin were "absolutely notorious," and the Galway barracks "were also notorious throughout the United Kingdom;" and at the Curragh "the huts were in a deplorable condition." Belfast, Portsmouth, Plymouth, and Manchester were also described as very unsatisfactory. These descriptions, given, it must be remembered, by the responsible head of our military system, afford evidence of a most culpable neglect of the health and comfort of our soldiers, and naturally raise the questions, who was responsible for it, and in what manner could it be explained. On this point Mr. STANHOPE exonerates the Royal Engineers, the executive entrusted with the care of the buildings, and says: "The difficulty was that in times when there had been a cry for a reduction of the estimates, the inclination had been to cut down the expenses for those things which, though necessary to be done, it could not be said must be done at any particular time. Therefore, over a long period of years they [the Royal Engineers] had not had put into their hands more than enough money to keep the barracks going, and they had never had enough money to deal with them on a really large and effective scale." The fault, then, would seem to lie with the Lords of the Treasury, who cut down the estimates under a system of so-called economy, and the successive War Ministers, who had not the moral courage to insist upon measures essential to the health and comfort of the troops being carried out regardless of cost. We are disposed also to give a fair share of the blame to the members of the House of Commons, who insisted on a reduction of the estimates without due consideration of the consequences involved in such a course. We trust that the lesson now taught may not be thrown away upon any of these three, and that in future our camps and barracks may not be allowed, from false motives of saving, to fall into a dangerous, almost a ruinous, condition. Mr. STANHOPE is of opinion that a large and comprehensive scheme of reform in the housing of our troops is necessary on the grounds of—(1) economy; (2) military efficiency; and (3) the health and comfort of the soldiers. The first and second of these he proposes to effect chiefly by concentration of the troops, and, with this view to increase the accommodation at Aldershot, to convert the prison at Woking into a barrack, to concentrate troops at Newcastle, Colchester, Sheffield, and other places, and apparently to remodel the arrangements at Shorncliffe. He also proposes to build new barracks and to complete the existing ones at Portsmouth, to reconstruct some of those at Plymouth, to remove the cavalry from Manchester and sell the barrack; and to make some provision for the married men of the Guards in London. It is proposed to concentrate at the Curragh the cavalry regiments scattered in different parts of Ireland and three batteries of artillery, to build new barracks and remodel some of the old ones in Dublin, to build a barrack at Belfast, and to increase the accommodation at Enniskillen. Besides these works at home, the sanitary condition of the barracks at Malta, Gibraltar, Bermuda, and the Cape of Good Hope is to receive attention, and the necessary improvements are to be carried out. These changes are estimated to involve an expenditure of £4,100,000—a very large sum, of which a considerable amount might have been saved by judicious expenditure in keeping the huts and barracks in proper repair. It is but another instance of the extravagance of parsimony which so often occurs in the public service, the saving of a shilling at the cost of a pound. But the third and by no means the least important ground for this expenditure is "the health and comfort of the men." On this point, Mr. STANHOPE said: "After having come to the conclusion that the sanitary state was bad, the next step had been to frame a general scheme. Such a scheme had been prepared by the Quartermaster-General, and had undergone the most careful examination and consideration." We do not find any reference made to the opinion of the head of the Medical Staff, but as that, under the present organisation, appears to be a branch of the Quartermaster-General's department, it is possible he may have been consulted. It would, however, have been more reassuring had we been informed that the scheme was not purely a military one. We are the more disposed to regret the absence of such an assurance as we observe that Mr. STANHOPE states that he had consulted a contractor of high rank, a surveyor and an architect, on the plans prepared by the authorities who are now in charge of the barracks, while no mention is made of the opinion having been taken of any member of the medical profession with regard to the sanitary arrangements." We sincerely trust that this important subject may not be overlooked, for we know too well how apt contractors, surveyors, and architects are to omit matters of great importance to health from a sanitary point of view.

Mr. STANHOPE stated it to be his intention to reconstruct and revive the Sanitary Committee originally formed by Lord HERBERT of LEA, and also to appoint an expert who would be able to go down and examine any place where the Government thought it desirable his services should be given. This is a judicious resolve, but it is a pity it was not made before the scheme was drawn up by the Quartermaster-General and the plans referred to the gentlemen mentioned, as the committee and the expert might have been able to suggest many improvements which it will now be more difficult to introduce. There is one other point which we would impress upon the authorities—the necessity for having some qualified, competent, and reliable person on the spot to see that the approved conditions of the contracts are fulfilled, and that the work is not scamped. The recent revelations respecting certain Board Schools give force to such a recommendation, and we have a vivid recollection of some eccentricities connected with the construction and drainage of a camp hospital which tends to emphasise the necessity for such an appointment. We cannot conclude these remarks without expressing our appreciation of the course Mr. STANHOPE has taken in a matter having so important a bearing on the health of the Army.

THE general fact that our present educational arrangements have a tendency to the diffusion of the specific fevers amongst children has already been fully recognised in recent education codes, and especially in those clauses which authorise the sanitary authorities to intervene and require the closure of elementary schools; but the nature and extent of this effect of a system of compulsory school attendance still presents many points of obscurity. One of the difficulties

met with is well exemplified in the case of measles. Thus, it has been held by some that, in view of the long period of incubation which this disease generally presents, together with the fact that it is infectious at a period before it is usually recognised, there is, as a rule, no great advantage in attempting to control school attendances with a view to its prevention. This and other allied points are dealt with somewhat fully in a report[1] which Mr. SPEAR has just submitted to the Local Government Board on an extensive prevalence of measles at Hanley and in other Staffordshire pottery towns during the close of 1888 and the early part of 1889.

The outbreak, to which we drew attention on several occasions during its course, was especially severe in its incidence on Hanley, Shelton, Fenton, and Burslem, the death-rates from this one cause during the period of April, 1888, to June, 1889, ranging from 5·5 to 6·2 per 1000 of the population at the last census. Dealing with Hanley as typical in all essential respects of the other places attacked, Mr. SPEAR points out that there were somewhat over 3000 cases distributed amongst 1341 households, and with such information as he was able to procure he proceeds to discuss in detail the influence of school attendance on the spread of the disease. Each school district is dealt with separately, the facts being set forth in a series of plates which show the curve of the disease prevalence whilst the schools were closed, whilst partial closure was brought about by absentees, and during total school closure; and, allowing for the incubation period of the disease, the curves tend in almost every instance to show that the epidemic prevalence continued to increase so long as the schools were open; that the partial closure of schools led to a beginning of diminution about a fortnight after it came into operation, the amount of diminution bearing relation to the amount of reduction in the average attendance of schools during this period; and lastly, that within somewhat over two weeks of the schools being entirely closed there was a marked drop in the curve indicating the extent of the prevalence. This drop commenced at times even as the result of closure that reduced the attendance by some 50 per cent., and was greatly expedited by subsequent total closure. And in a number of instances a partial reopening was soon followed by an increase in the number of attacks; this being again successfully checked by further resort to school closure. This statement, which embodies generally the effect of the varying amounts of stringency adopted as to school closure, was found to exhibit modifications in special instances, and these are worthy of study by those who may be concerned in advising sanitary authorities as to the circumstances under which school closure may be expected to influence the diffusion of the infection of measles. But, viewing the action adopted as a whole, it remains prominently established that in the case of the Hanley epidemic the elementary schools were centres of infection, and that their closure exercised a material influence in controlling the epidemic spread of the disease.

The report also takes note of other points of interest. Not only was the diffusion of the infection exceptional in amount, but the mortality, which reached some 9 per cent. of the attacks, was enormous for measles. Susceptibility to measles and excessive fatality of the disease have on several occasions followed on prolonged absence of the malady; but this was certainly not the case as regards Hanley. Thus, during the ten years 1851–60, when the measles death-rate for England and Wales was 2·8 per 10,000, it was 3·8 in Hanley. In the next decennium the rate for Hanley reached 6·2, and in 1871–80 it was 4·9, the corresponding rates for the country generally being 3·8 and 3·7 respectively. Meteorological conditions are next considered as a cause of the exceptional characteristics referred to; but although the epidemic occurred during a period of low temperature, which always exercises an unfavourable influence on measles, especially as regards its fatality, there is nothing to show that Hanley differed particularly in this respect from other parts of the kingdom. Referring especially to this fatality, it has to be borne in mind that the infantile death-rate of Hanley has always been high, and the conditions which have led to this, and which have had prominence given to them both by Dr. ARLIDGE and Dr. BALLARD, must unquestionably have influenced the fatality of measles. But another circumstance is referred to by Mr. SPEAR in connexion both with the rapid diffusion and the virulence of the disease, and that is the internal condition of the elementary schools, especially as to the amount of air space and ventilation provided. School accommodation in Hanley is insufficient for the wants of the town, and the result has been overcrowding. Indeed, nearly everywhere Mr. SPEAR found that the standard of floor and air space required by the Education Department—a standard that does not err on the side of excess—was not secured; and this owing to attendances beyond those which the buildings were adapted to. The school inspector, referring to one of these schools, reported that "the infants are horribly overcrowded"; and again, "the room is hopelessly overcrowded." And not only so, but the arrangements as to ventilation were often very defective, and, as regards at least one set of schools, such amount of air as was available for the children was found to be contaminated by foul privies.

We would by no means assert that unwholesomeness of schools was the only explanation of the severe incidence of measles in Hanley, in common with other pottery towns; but we are quite certain that conditions such as those described add very materially to the risk of contracting measles, besides tending to lower the general tone of health, and so to lessen the chance of recovery from infectious disease. Compulsion as to school attendance must be maintained, but it must be recognised that the more complete its enforcement the greater is the risk to children of contracting certain of the specific fevers, and the greater is the responsibility which devolves on the department of the State which controls our public elementary education to see that this risk shall not be made greater by faulty construction of schools, by unnecessary crowding of children within them, and by arrangements outside the buildings which effectually tend to deteriorate the quality of the air breathed by the school inmates.

The story of this epidemic and the considerations raised by it deserve study, especially at the hands of two bodies. The Education Department of the Privy Council Office may learn from the report that a number of important principles

[1] Eyre and Spottiswoode, East Harding-street, E.C.; Adam & Charles Black, Edinburgh; Hodges, Figgis, & Co., Dublin.

affecting health still need attention in connexion with the circumstances of compulsory school attendance as administered by their office; and medical officers of health will find, from the results of the action adopted in Hanley, much that may serve to guide them in advising sanitary authorities as to the methods of school closure which are best calculated to check the diffusion of measles.

A MODIFICATION of the current views as the symptoms of complete transverse lesions of the spinal cord will be necessary after the masterly and convincing paper which was read by Dr. BASTIAN at the meeting of the Royal Medical and Chirurgical Society on Feb. 22nd in support of his contention, expressed eight years ago, that in *complete* lesions of the spinal cord there is absence of the knee-jerks and other deep reflexes and flacidity of the limbs, and not rigidity with increased reflexes as usually taught. In support of his contention he gave minute and accurate clinical records of four cases in which there was developed, under observation, complete transverse lesion of the spinal cord (in these cases due to extensive softening). At first the deep reflexes were exaggerated, but as the lesion became more and more complete, as shown by absolute motor and sensory paralysis, the deep reflexes entirely disappeared, and the limbs became completely flaccid. This condition of things continued until death, when the necropsies showed (at any rate in three cases) complete destruction of the cord at the level of the lesion. In these cases shock was out of the question, the lesion was in the upper part of the cord, and there was not the slightest evidence of any independent lesion in the lumbar enlargement. Dr. BASTIAN fortified his position by quoting nine cases of fracture-dislocation in the cervical and upper dorsal regions, in which flaccidity of the limbs and abolition of the reflexes were noted soon after the accident, and persisted until death occurred, in most cases weeks later, when all shock had long passed away. It is much to be regretted that fuller opportunities could not be afforded for discussing so important a communication; but in the brief discussion which followed on these points additional cases were quoted by Dr. HUGHLINGS JACKSON and Mr. BOWLBY, completely confirming the views expressed in the paper. Dr. BASTIAN looks with suspicion on the cases which have been described as complete lesions due to compression of the cord in POTT'S disease. A case will be found in our issue of Feb. 22nd, in the report of the meeting of the Pathological Society, in which for twelve months before death there had been absolute paralysis of motion and sensation, but in which there was rigidity and increased reflexes. Here, to the naked eye, the disorganisation of the cord at the level of the lesion appeared to be complete; but careful examination by modern methods showed the existence of a considerable number of axis cylinders traversing this apparently disorganised portion of the cord, so that this case, and probably also those referred to by Dr. BUZZARD in the discussion, would hardly come under the category of *complete* lesions to which Dr. BASTIAN'S paper refers, and with regard to which he completely established his case.

Another point of interest from a clinical point of view was the different behaviour of the superficial and deep reflexes. In all of Dr. BASTIAN'S cases, after motility, sensibility, and deep reflexes were completely abolished, the plantar skin reflex persisted for a short time. Mr. BOWLBY also had observed that in the cases of fracture-dislocation, some weeks after the accident the skin reflexes returned, while the deep reflexes remained absent until death. Of not less interest than these clinical observations were the remarks made by Dr. BASTIAN as to their bearing on the theories with regard to muscular tone and the deep reflexes. He held that these cases showed that the tone of the muscles and the presence of the knee-jerk depended on influences passing down from the encephalon, favouring these reflex phenomena. This influence was thirteen years ago attributed, on theoretical grounds, to the cerebellum by Dr. HUGHLINGS JACKSON, and to his view, with some modifications, Dr. BASTIAN adds his support. Dr. JACKSON believes that the normal tone of the muscles is due to the balance of influences constantly passing down from the cerebrum and cerebellum, the former tending to diminish and the latter to increase the tonus of the muscles, and in this way accounts for the increased reflexes in cases of hemiplegia, the cerebral influence being cut off and the cerebellar influence no longer interfered with. There is evidence that this cerebral influence descends by the pyramidal tracts, and, assuming that these authors are correct in their views, it seems probable that the cerebellar influence descends in the grey matter. This is supported by the occurrence of increased reflexes in the cases of slow compression, where the grey matter is usually less damaged than the white, and by a case of Mr. THORBURN quoted by Dr. BASTIAN, in which there was hæmorrhage almost confined to the grey matter in the cervical region, in which the absence of deep reflexes peristed, although the conducting functions of the white columns were to a considerable extent restored. Now that the matter has been so prominently brought before the profession we may expect that facts will soon be forthcoming to settle definitely some of the disputed points to which we have referred.

IN spite of the pessimistic opinions regarding the effect of town life on health expressed by Dr. WILLIAMS-FREEMAN in his recently published essay, he serves a useful purpose in contrasting the rate of mortality in London and its various parts, not with the general English rate or with the rate in other large towns, but with that in selected healthy rural districts. It cannot, moreover, be too often pointed out that the recorded death-rates in towns very inadequately represent the waste of life in towns. Not only is the age-distribution of town populations peculiarly favourable to mortality, but such populations are being continually recruited by the immigration of selected healthy lives from the rural districts, no inconsiderable proportion of which, on failure of health through town residence, return to their rural homes. Furthermore, each of these influences, which tend to understate the true death-rates in towns, operates adversely upon the mortality of the rural districts, so that the comparison between town and country rates is invalidated in a twofold manner. It is, therefore, all the more necessary that town rates should be compared

with a high standard of health. Dr. FARR'S healthy district life table supplied such a standard. Dr. WILLIAMS-FREEMAN has adopted as his standard the death-rate of the 101 selected registration districts in which the annual death-rate during the ten years 1871–80 was below 17 per 1000. These districts had in 1881 a population just exceeding two millions, and therefore supply a basis of observation of more than twenty million years of life. The mean annual death-rate in these districts during the ten years was only 15·45 per 1000, and Dr. WILLIAMS-FREEMAN compares with this the rate of 23·66 in Registration London. Registration London he divides into Urban London, with a rate of 24·69, and Suburban London, with a rate of 20·42. The value of this attempted comparison between so-called Urban and Suburban London is, however, to a great extent invalidated by the fact that whereas correction appears to have been made for differences of age-distribution, no correction has been made for the more important disturbing influence of deaths in hospitals. All the great general hospitals of the metropolis are situated within what is styled Urban London, and it is beyond question that they receive no inconsiderable proportion of patients from the districts called Suburban London. In order to show the magnitude of this disturbing influence, it may be well to point out that the recorded death-rate for Whitechapel in 1871–80 was 33·0 per 1000, and corrected for age-distribution it is given by Dr. WILLIAMS-FREEMAN as 35·4; whereas, if corrected by the exclusion of all but its due share of the deaths in the London Hospital, situated in the district, the rate is brought down to 23·6. So with other districts containing large hospitals; the recorded rate in the London City district is brought down from 27·1 to 21·8, and that in the Strand district from 28·6 to 24·1. It is patent, therefore, that any comparison of the rates of mortality in different parts of the metropolitan registration area, without due correction for the disturbing influence of public institutions, especially of hospitals, is fallacious. It would undoubtedly be valuable if it were possible to eliminate from the mortality statistics of towns the disturbing influence of the immigration of young and healthy lives; but we see grave objections to Dr. WILLIAMS-FREEMAN'S method of calculating the proportion of deaths under the age of fifteen years to the number of registered births. To mention but one of these objections. It is a mistake to suppose that, "generally speaking, there is not much change of locality" under the age of fifteen years. A no inconsiderable proportion of town immigrants are young married couples bringing young children with them; indeed, it has been tested by examination of the census returns, that from 10 to 15 per cent. of the children under the age of fifteen years living in London were born outside London. It follows, therefore, that the births recorded in towns very far from represent the true number out of which the deaths under the age of fifteen years occur; whereas in rural districts this method understates the number of deaths under the age of fifteen that occur out of the recorded number of births. This method for the purpose of comparison between town and country unduly raises the mortality in towns and unduly depresses the mortality in rural districts, which supply the emigrants to towns.

Annotations.

"Ne quid nimis."

DEGREES FOR LONDON MEDICAL STUDENTS.

THE discussion at the extraordinary comitia of the Royal College of Physicians on Saturday last is the first important professional movement since the issue of the report of the Royal Commission in the effort to secure degrees for London medical students on similar terms to those on which they are now granted to Scotch and provincial students. The Teaching Colleges have already held two conferences with the Senate of the University of London, and the position of the existing University with regard to those who insist either on a real teaching side in that University, or on the necessity of founding another university in London which should be both local and teaching, with work and aims quite distinct from an imperial examining board, is beginning to be cleared up. Can the present University, freely and *con amore*, accept a true teaching side as advised by the commissioners, or will it, by permitting only an inferior representation on the Senate and an insistence on its giving mere pass degrees, simply allow it to struggle on with a precarious existence? This is the essential point now under discussion, and on its solution depends the future of liberal education in London, and the question of the competency of the present University to meet the educational wants of local London, or the prospective establishment of a Teaching University to meet these local requirements. The subject of medical degrees for London students is even more pressing than the removal of the difficulties experienced by teachers and students in arts and science. It is therefore to be hoped that the representatives of the Royal College of Surgeons will speedily agree to the report of the Committee of the Royal College of Physicians, so that some united action may be brought to bear on the University of London in the interest of the average London students, unless it is thought that a new university would be better able to redress their grievances. At present the most diverse opinions are put forward. One speaker at the Comitia believed that the University of London would grant everything; another, that it would grant nothing; a third, that a compromise is possible; a fourth, that a new Teaching University alone could repair the injustice under which the medical student is suffering; a fifth, that two Universities in London would be deplorable, and so on *ad infinitum*. The proposal, in the scheme of the University of London, to accept a preliminary scientific examination, conducted by the Royal Colleges, is untenable; and the extent to which the University of London is prepared to accept the professional examinations of the corporations in lieu of their own should be settled as speedily as possible by a conference between the representatives of the Royal Colleges and the Senate of the University of London.

THE ARMY MEDICAL SERVICE.

IN the House of Commons on Monday last Dr. Farquharson asked the Secretary of State for War what steps he intended to take with reference to the recommendations contained in the report of the committee presided over by Lord Camperdown, appointed to inquire into the pay, status, and conditions of service of the medical officers of the army and navy. We confess to considerable surprise at the Secretary of State's answer, which was quite in the style of "how not to do it." He stated first that he did not "propose to give effect to the recommendations involving expenditure." The legitimate deduction from this is that the committee was appointed in the hope that it would recommend certain reductions in the Estimates.

After a prolonged and presumably careful inquiry it recommended certain changes which Mr. Stanhope alleged would, if fully carried out, involve an increase of £100,000 per annum. We scarcely see, from a perusal of the report, how this could be; but, accepting it as correct, the question arises, why did he appoint an independent committee unless he was prepared to give effect to recommendations even if they involved expenditure? But, secondly, he said, "As regards the recommendation to confer combatant titles on medical officers, as I find that my military advisers are unanimously opposed to it, and the naval medical officers do not desire it, no change is proposed in the titles." Now, on reference to the report, we find that the committee did not recommend that "combatant titles" should be conferred on medical officers, but that a compound title should be given, which, while clearly indicating the professional status of the officer, should at the same time show his position with reference to the combatant officers. A difficulty had arisen from the ill-judged action of the War Office in abolishing relative rank, and it was apparently to meet this that the committee made their recommendation. We do not know how Lord Camperdown and his colleagues may feel on the subject, but we think the course taken by Mr. Stanhope most objectionable. In their instructions, the committee were requested to consider this subject, and they seem to have done so very carefully. They are now made aware that their recommendations cannot be accepted because "my military advisers" are opposed to it. If their opposition was to decide the question, where was the necessity of referring it to the committee at all? Mr. Stanhope could easily have ascertained the opinion of his military advisers, and, with any knowledge of the service, he might have known that his adjutant-general and his followers would undoubtedly object to anything of the kind. Why, then, did he not settle it without the farce of an inquiry by a committee? We own to feeling disappointed with Mr. Stanhope in this matter, because he has not shown the straightforward conduct which we should have expected of him. We have always consistently objected to purely military titles being given to medical officers, but considering the strong feeling in the Department to which expression has been given, we think that some mode of showing the relative rank held by them is absolutely necessary, and we believe the compound titles recommended by the committee would have satisfactorily answered the purpose. We regret the decision of the War Minister more for the sake of the army than of our profession, for we fear it will have the effect of deterring the best class from entering the service, with the result of a dearth of qualified candidates, or at least of the vacancies being filled by men much inferior to those who have lately been obtained. As Dr. Farquharson has been informed of the recommendations which are not to be adopted, perhaps he may ask for a statement of those which are acceptable to Mr. Stanhope and his military advisers.

TEETH IN OVARIAN CYSTS.

THE subject of minute examination of the teeth found in ovarian dermoid cysts has not, in the opinion of Mr. Bland Sutton (*vide* a paper recently read at the Odontological Society), received attention commensurate with its scientific interest. The age at which these teeth develop is uncertain: for instance, cases have occurred where ovarian cysts in children contained fully formed teeth; whereas in adults they may be found only in a very early stage of development. Nor is there any certainty as to the time of eruption or shedding of these teeth, being in this respect unlike hair, which becomes grey and falls out concomitantly with the hair of the head. The number of teeth in ovarian cysts varies considerably, two to four being common, but it may reach three to four hundred. Owen, Salter, Coleman, and Tomes mention ovarian teeth, but give only meagre descriptions of them. Ovarian teeth have enamel and dentine, the enamel being generally irregular, with deep fissures and pits. They may be like normal buccal teeth surrounded by a bony alveolus, and possess an alveolar-dental periosteum, and this resemblance to the upper or lower jaw has given rise to the erroneous idea that dermoid cysts are included fœtuses. In shape these teeth may be divided into three groups—multi-cuspidate, bi-cuspidate, and canineiform. As a general rule the crown and fang are in inverse proportion as to size, and multiple fangs are very exceptional. The cementum varies considerably: sometimes there is only a thin layer on one side of the fang; in other cases it is absent altogether. Salter described nerves as being distributed to ovarian teeth, but this has not been confirmed. In one especially suggestive case, where two ovarian cysts were present, Mr. Bland Sutton found in one tissue indistinguishable from brain matter, and in the other teeth, in which, however, he was unable to demonstrate satisfactorily the presence of nerves. The microscopical specimens exhibited of developing ovarian teeth showed that the type follows that of normal buccal teeth, there being a papilla and a dipping down of epithelium to form the enamel organ. The theory that caries ever takes place in ovarian teeth is altogether unsound, and is due to the deceptive appearance of the enamel, which is often of worm-eaten character, the ravines and pits filled with fibrous tissue, which in macerated specimens leaves a cavity much resembling caries; in other cases, moreover, the pulps may absolutely penetrate the enamel. Mr. Charters White supplemented the paper with a description of the irregular arrangement of the enamel and dentine in these teeth as shown under the microscope.

THE PARIS WATER-SUPPLY.

SEVERAL years ago elaborate investigations were made and detailed plans drawn up with a view to increasing the Paris supply of pure spring water. It was found that the waters of two small streams, the Vigne and the Verneuil, situated in the departments of the Eure and the Eure-et-Loire, were exceptionally pure, and could, without any very great difficulty, be brought to Paris. These two sources would supply 130,000 cubic metres of water per day. Two years ago preliminary works were commenced; but when the inhabitants of these departments discovered that the Parisians were desirous of utilising these waters a great outcry was raised. Local agriculture and industry, it was said, would be ruined; and the water, though it had scarcely been utilised before, suddenly acquired almost priceless value. The anticipation of the general elections, complicated by the Boulangist movement, caused the Government to pause before doing anything that might vex the electors of the Eure and the Eure-et-Loire. Thus, though it was most imperative to improve the water-supply of Paris in time for the Exhibition year, political considerations proved of greater weight, and nothing was done. Now, however, the general elections are over, the Boulanger danger is past, and the Government has once more ventured to take the matter in hand. Notwithstanding the protests of M. Terrier, the member for Dreux (Eure), who spoke on behalf of the owners of property on the banks of the Verneuil, the Vigne, and the Avre, the Chambers have now adopted, with some modifications, the project submitted. But this does not suffice. It is also necessary to secure the springs of Maroy, Cochepies, Voulzie, Villemar, and St. Thomas, and then the supply of absolutely pure water for Paris would be raised from 130,000 to 340,000

cubic metres per day. Paris, as is well known, has in general an excellent provision of water from the Vanne and the Dhuis, but in the dry weather the quantity is insufficient. The Seine water is then supplied instead, and this is almost invariably followed by an outbreak of typhoid fever. Thus, last year, the Seine water was distributed from May 25th to June 19th in the 13th, 14th, 16th, and 9th arrondissements of Paris, districts which comprise about 500,000 inhabitants. The number of patients admitted into the hospitals coming from these districts and suffering from typhoid fever varied from 15 to 30 per week before the Seine water was supplied. But, allowing a certain time for incubation, we find that during the week from June 7th to 13th there were 73 admissions, and the numbers for the weeks following were 53, 127, 100, 120, 129, and 73. This hospital record only represents a fraction of the mischief done; still, it is evidence quite strong enough to prove the necessity of increasing the supply of pure water.

PROPOSED JOINT HOSPITAL BOARD IN SURREY.

THE Epsom, Carshalton, and Sutton local boards of health have taken the first step towards procuring a hospital for infectious diseases. Delegates from the three authorities have conferred, and they have heard from Mr. Jacob, the local medical officer of health, how the proposal can best be carried out. They have also wisely decided to organise themselves before proceeding with any expenditure, and they have by a very large majority passed a resolution to the effect that it is desirable that they should be formed into a united district by the Local Government Board for the purpose indicated. Joint boards for hospitals have powers and facilities for working which are entirely lacking in the case of non-corporate bodies, which are the mere outcome of a temporary and voluntary agreement, and it is to be hoped that the local boards will severally endorse the action taken by their delegates. It is well-nigh useless for sanitary authorities to adopt the Diseases Notification Act unless they make adequate provision for dealing with those cases which would, apart from proper isolation, become sources of danger to the communities in which they are placed.

SALINE INJECTIONS INTO VEINS IN DIABETIC COMA.

THE striking case related by Dr. Dickinson at the last meeting of the Clinical Society is somewhat encouraging as to the value of intravenous injection of saline fluids in cases of diabetic coma, although, unfortunately, a fatal issue eventually ensued, for after the first injection—of 106 ounces—the patient regained consciousness to a very complete extent. The importance of such a respite may occasionally be very great—for instance, in the case of one who is attacked with diabetic coma without having made his will. It is something to know that by this method the coma can, temporarily at least, be made to pass away. The subsequent course of Dr. Dickinson's case is equally instructive. The patient relapsed into coma, and resort was again had to the procedure which had already proved of service. But this time the amount of saline fluid received into the circulation was actually more than the estimated average total amount of blood in the adult body. In spite of the state of plethora which so heroic a course must have produced, the patient once more regained consciousness. Dr. Dickinson's conclusions, that 100 or even 200 ounces of saline fluid may in such cases be introduced into the circulation with advantage, but that the benefit to be gained thereby can only be temporary, were doubtless justified by the experience in this case. Perhaps the same end might be obtained more rapidly if the injection were preceded by venesection, so as to secure a greater degree of dilution of the blood with a comparatively small amount of the diluent. The practice of saline injections in diabetic coma has, as Dr. S. Mackenzie remarked, been frequently employed, but, so far as we know, in no case with permanent good results. Indeed, few patients submitted to this treatment have, as in Dr. Dickinson's case, regained consciousness even for a short time.

INFLUENZA IN OUR LARGE TOWNS.

DURING the first four weeks of this year the mean annual death-rate in London was equal to 29·7 per 1000 of the estimated population. How much of this excessive death-rate was due directly and indirectly to the influenza epidemic the Registrar-General's returns do not enable us to decide. We know, however, that in the twenty-seven large provincial towns the mean death-rate during the same period did not exceed 23·7, being 6·0 per 1000 below the metropolitan rate. Since the end of January the death-rate in London has fallen to normal proportions, and averaged only 21·4 per 1000 during the five weeks ending last Saturday, the rates in the individual weeks ranging from 20·6 to 21·8. Coincidently with its decline in London the death-rate has rapidly increased in the large provincial towns. The rate in the twenty-seven towns dealt with in the Registrar-General's weekly return rose, during the five weeks ending last Saturday, from 23·6 to 29·3, the mean rate in these towns during this period being 26·9, and exceeding the metropolitan rate by 5·5 per 1000. During the first nine weeks of this year the mean annual death-rate in the twenty-eight large English towns, including London, having an aggregate population of nearly ten millions, was 25·3 per 1000, against 22·3 and 21·0 in the corresponding periods of 1888 and 1889; the mean rate in this period was 25·1 in London and 25·5 in the provincial towns. The recent death-rates in many of the provincial towns far exceed the high rates that prevailed in London in the early weeks of this year; for instance, during the week ending last Saturday the recorded rates were 34·9 in Bradford, 35·1 in Sheffield, 35·6 in Wolverhampton, 36·3 in Blackburn, 36·5 in Leeds, 40·7 in Manchester, 43·1 in Preston, and 43·7 in Bolton. This marked excess of mortality has been most conspicuous in the manufacturing towns of Lancashire and Yorkshire; and, so far, the rates in Cardiff, Brighton, Leicester, Nottingham, and Hull have been exceptionally exempt from the general increase. Speaking generally, and judged by the statistics of our largest towns, our national death-rate during the past nine weeks has very considerably exceeded that recorded in the corresponding period of any year since 1882. It should, however, be pointed out that the mean death-rate in these large towns during the corresponding periods of the seven years 1876-82 was 25·6 per 1000, which somewhat exceeded the rate in the first nine weeks of this year.

THE PROTECTION OF INFANTS.

IF we may judge from a series of proposed amendments, the Government are determined to render the Act for the protection of infant life as efficient as possible. Among other intended alterations is one which will provide for State supervision even in cases where a single child is placed out in the care of a nurse. We have repeatedly insisted on the necessity for this addition to the existing law. For want of it the baby-farming system, carried out on a small scale but over an unlimited area, has long maintained its place among neglected abuses. We may now begin to look for its extirpation. Another amendment will raise the age of protection to five years. Registration will have greater scope than hitherto. It will take more particular note of

the identity of the child, of the residence of the parent who is responsible for the accurate statement of these details, and, in the event of transfer to a second nurse, of this person's name and address. Inspectors will watch over the due performance of the duties required by the Act, and will have the right of entering in their official capacity not only registered houses, but any dwelling in which there is reason to believe that a nurse child is kept for hire. There is not much that one can suggest by way of improving upon these excellent addenda to the present statute. A notice of any change in the address of any of the responsible persons will, we take it, be secured by suitable penalties, and it is also to be hoped that in the case of an illegitimate child every effort will be used to fix the liability and maintain the practical interest of the male parent in his offspring.

THROMBOSIS IN THE CHLOROTIC STATE.

M. VERGELY, in a thesis (summarised in *Centralbl. f. Allg. Path.*, No. 5) upon Venous and Arterial Thrombosis in the Course of Chlorosis, points out that this complication often arises early in the disease. He reports fourteen cases of venous thrombosis—in nine spontaneous, in three after over-exertion, and in one iliac thrombosis was attributable to distension of the sigmoid flexure. In eight cases the thrombus was symmetrical; in four cases the thigh was the seat of the plugged vein; in seven the calf. But arterial thrombosis also occurs in this disease; at least, it has been noted in the pulmonary and Sylvian arteries. It does not appear that mention is made of thrombosis of the cerebral sinuses, which is also well known to occur in the chlorotic. The cause of such spontaneous thrombosis is referable to an increased tendency of the blood to coagulate, and also, perhaps, to the altered nutrition of the vessel walls. The latter factor is supported by Virchow's discovery of fatty degeneration in the intima of the aorta in chlorosis. But in the two cases related by Vergely, where the middle cerebral artery was thrombosed, no histological changes could be detected in the bloodvessel, although it is thought that slight endothelial lesions might have passed undetected. Certainly there is much yet to learn concerning the etiology of spontaneous thrombosis.

NEEDLESS NOISE.

STREET CRIES and the din of town life in general can by no means be regarded as adding to the comfort of quiet citizens. Familiarity has doubtless in many cases bred, not indeed an impossible contempt, but a certain unconcern engendered by habitual endurance. The ache of annoyance is not forgotten, but it ceases to be acutely felt. It is only, as a rule, when the evil is aggravated by excess, or when it enters as a turbulent and jarring interruption during some interval of surrounding peace, that it excites the angry comments of a long-suffering public. The daily rattle of traffic, the shouts of salesmen, the more localised clatter of railway trains, and even the scream of the steam-whistle we must perhaps for the present put up with. These are seemingly necessary evils inseparable from a workaday existence. It is quite a different matter when the shriek of the locomotive disturbs our slumbers, when our lady neighbour through the wall sings nightly at the top of her voice, when the neighbouring dog awakes disquieted, and for an hour or more keeps up a rhythmic howl, or when the clang of church bells or the mechanical melody of a street organ thrilling the early morning air compels our unwilling attention. The day of rest is no exception. Its rest and its quiet are at best comparative terms. Needlessly, heedlessly, trade will go its round, and will neither accept nor allow to the week-long worker even for one day the full enjoyment his right to be undisturbed. It matters not apparently whether the tyranny of custom in this particular can or cannot be defended on grounds of supposed necessity. Take for example the case of the newspaper hawker. Surely we have here a form of annoyance which on any day of the week might be dispensed with, as far at least as public convenience goes. Its continuance on Sunday is therefore the more inexcusable. Whatever the news, it may be seen placarded at the nearest newsvendor's, and it is probably thus rather than from the garbled shouting of hawkers that most persons gather its purport. The general preference for quiet on one day, if one only, ought to be significant enough, and its wholly needless interruption in the manner described is nothing less than a nuisance, and as such might very properly be made a subject of public protest.

THE SUPPRESSION OF RABIES.

DR. G. FLEMING contributes to the current issue of the *Nineteenth Century* an interesting and sensible plea for the introduction of measures for the suppression of rabies in this country, the case being stated in a manner which ought to convince the most sceptical. He begins with a brief historical survey of the prevalence of rabies in different parts of the world, and especially in these islands, quoting from old chronicles to show that it was not unknown in the eleventh century. The aims of the mediæval physicians were directed to the *cure* of the disease, and not to its prevention; but experience in this present century has shown that whenever police measures have been enforced the ravages of rabies have been checked. Dr. Fleming asserts that the three reasons for the existence of rabies in this country are: (1) A defective sanitary organisation for dealing with the contagious diseases of animals; (2) ignorance and apathy on the part of the public; and (3) a spurious sentiment of humanity with regard to dogs. He is very severe and caustic in his treatment of those who entertain the last-named views—the "cynophilists" as he terms them—and contrasts the treatment to which civilised and cultured humanity subjects the horse with the tenderness shown towards the dog, who must not even be suffered to bear the slight inconvenience of the muzzle. For, as he well shows, there is no doubt that rabies can be suppressed by restrictive measures, including muzzling, registration, and licensing, with a sufficiently high dog-tax, the destruction of stray dogs, and an efficient quarantine. Such measures would, if carried out for twelve months, rid this country of the disorder, and all fear of further attacks would be averted by maintaining the quarantine regulations. They cannot, however, be left to local authorities, but only be satisfactorily carried out by the central Government; whilst if adopted they would do away with the need for recourse to Pasteurian prophylaxis, and indeed also with the necessity of muzzling.

REDUCED CONSUMPTION OF ALCOHOL IN HOSPITALS.

WE have heard a good deal of the reduced consumption of alcohol in workhouses, where the pressure of abstemious or austere guardians may be supposed to operate. A committee of the British Medical Temperance Association on the Consumption of Alcohol in Hospitals now enables us to see how far a similar process is going on in hospitals. The medical influence is more largely represented in these institutions, and is more independent. It becomes a very important and interesting question for the profession to know whether alcohol is being more or less used. Everything in hospitals gives significance to this matter. The patients for the most part are not teetotallers, to say the least of it; they are not over well-fed; the

diseases which entitle them to admission as in-patients are more or less grave and exhausting; the hospital physicians and surgeons are the great teachers of our medical schools, and their practice gives the clue to the general practice of the country. We regard the inquiry, therefore, with much interest, and owe a debt of gratitude to the committee for undertaking it. They compare the consumption of alcohol in hospitals a quarter of a century since and now. For the practice in the earlier period—viz., 1863—they rely chiefly on a valuable book on "Vital and Economic Statistics of Hospitals and Infirmaries of England and Wales," by Dr. Fleetwood Buckle, R.N. For the consumption of alcohol in the year 1888 they are indebted to the secretaries of the various hospitals, to whom they cheerfully acknowledge their obligation. They still lament want of uniformity and regularity in keeping the wine accounts, but have no doubt of two facts standing boldly out—viz., that in the great majority of cases there is, as between the two periods, an increase of 300 per cent. in the use of milk, and a decrease of 47 per cent. in the use of alcohol. In 1888 the cost of alcohol per bed per annum showed a decrease varying from 30 to 83 per cent. on the cost per bed in 1863. Of seventy-three hospitals so compared only eight showed an increase, and only two a marked increase. These two are the North Herts and South Bedfordshire Infirmary—from £1 13*s.* 11*d.* in 1863 to £2 11*s.* 6¾*d.* in 1888; and the Stanley Hospital, Liverpool—from 7*s.* 3*d.* to 19*s.* 6*d.* In King's College Hospital (the field of Dr. Tod's remarkable practice) the decrease has been from £7 14*s.* 1*d.* per bed to £1 8*s.* 8*d.*; in St. Mary's from £5 19*s.* 2*d.* to £2 0*s.* 6*d.* The committee report that only one hospital in London—St. George's—maintains its quantity of alcohol, and they could not resist the temptation to say that the mortality from typhoid in this hospital in 1872 was just double that of Dr. Gairdner's in Glasgow under a milk treatment. The practice of the Fever Hospital of London is very important. The alcohol per bed in 1863 was £3 5*s.*, as against 15*s.* 9*d.* in 1888; whereas the expenditure on milk was more than double. Of course, these comparisons are and can only be rough and coarse. But they are not without significance. Nothing is worse than the wholesale and routine prescription of alcohol in disease, though nothing is clearer to men of open minds than its use in well-selected cases, and in definite and carefully administered quantities. On the surgical side of hospitals the antiseptic system is to be much credited with the reduction in the necessity for stimulants. The quicker healing of wounds and the practical abolition of surgical pyrexia and suppuration have made a difference which young men must have no difficulty in recognising.

PUERPERAL RISKS.

OUR contemporary, the *Newcastle Daily Leader*, treats its readers to a column on the risks of lying-in women from fatalities by blood-poisoning, especially on risks introduced from without by nurse, midwife, or medical attendant. The wisdom of frightening women by columns of such literature may well be questioned, however much we may credit the editor with good intentions. It is obvious that a newspaper is not the place for the discussion of such matters. Our contemporary will be glad to know that they occupy the first place in the minds of obstetricians and of medical practitioners, and that not only the principle of antisepticism, but its minutest details are canvassed in every medical journal. The basis of the *Leader's* article purports to be "An Interview with a Newcastle Physician," who proclaimed his own self-righteousness in using a hand-wash of perchloride of mercury (1 in 1000), but expressed the opinion that the majority of medical men do not recognise the danger there is in attending confinements when they have been in connexion with infectious cases. We think this an uncharitable and an unjust accusation. It is by the efforts of medical men that the mortality of puerperal fever, even in lying-in hospitals, has been reduced to a minimum, and general practitioners are not only well acquainted with the means of personal disinfection, but have enormous inducements to disinfect in safe ways. There are doubtless careless or even unintelligent men in the profession as in all other callings, but they are few and far between. The search for a perfect disinfectant is acute and constant; so much so that there is some risk that nurses and others may come so to rely on it as to attach a superstitious importance to it, and to forget that, after all, pure air, perfect cleanliness, and personal hygiene in medical man, nurse, and patient are the indispensable conditions of safety. As Mermann well says, an antiseptic douche given with a dirty syringe and dirty fingers may be the very medium of infection. It will be remembered that in a sad series of fatalities last year in London in the hands of a midwife there was reason to believe that the poison originated in suppurative disease in her mouth. The question is one of principle and intelligence rather than detail, and we so far second our contemporary as to note his warning, and at the same time assure him that the profession was never more earnest than in the study of methods to secure the safety of lying-in women.

INTRA-MUSCULAR INJECTIONS OF MERCURY IN THE TREATMENT OF SYPHILIS.

IN the last part for 1889 of the *Archiv für Dermatologie und Syphilis*, Dr. Watraszewski discusses the effect of the injection of insoluble mercurial preparations into the muscles. The mercurial salts, recommended for their parasiticide effect on theoretical grounds, have not shown any advantage, and practically the question of advantage lies between calomel, the yellow oxide, and the grey oil of mercury. With respect to calomel, while it is undoubtedly very effectual in the treatment of syphilis, it has proved dangerous to the patient, Runeberg having collected seven fatal cases; but the author found that dangerous symptoms could to a great extent be avoided by reducing the dose originally suggested by Smirnoff from three grains to not more than two-thirds of a grain, and this, too, without sacrificing its therapeutic efficacy. He regards the grey oil as recommended by Lang and Neisser as still more dangerous, instancing Kaposi's fatal case and Hallopeau's case of severe stomatitis and several cases of fat embolisms in the lungs which are on record. The author expresses, therefore, a decided preference for the yellow oxide of mercury, but in the reduced dose of two-thirds to one grain. These doses he has given thousands of times without ill effect, while the doses originally recommended, of from two grains to two grains and a half, have produced serious symptoms, such as adynamia, diarrhœa, stomatitis, &c. The choice of the vehicle for injection is not unimportant. Those hitherto used have been generally glycerine, olive, almond, or paraffin oils, or gum Arabic mucilage. The author made experiments on this point, injecting these vehicles alone into the jugular veins of cats, and found that serious embolic pneumonia was excited by the oily fluids, while the mucilage only produced scattered embolic foci of small size, which were absorbed without subsequent reaction of any importance. These experiments have a practical bearing, for in intra-muscular injections a vein is occasionally pierced, and serious pneumonia has ensued. Glycerine excites local irritation, and is therefore unsuitable. Dr. Watraszewski therefore finally decides that mucilage (gum Arabic 1 part, water 120 parts) is the best, as it combines all the essentials of a vehicle—viz.: 1. It can be made of the proper consistence to hold the powder in suspension. 2. It

has no local irritating effect. 3. It does not decompose the mercurial salt. 4. It excites no general disturbance. In the same number Touton relates a case in which, a few hours after the third injection of salicylate of mercury into the left gluteus muscle, that muscle seemed paralysed, and then tenderness and pain were felt radiating up to the sacrum and lower lumbar vertebræ, but abruptly terminating at the middle line. The pain lasted two days, but twenty-four hours after its commencement there appeared an abortive herpetic eruption—i.e., the eruption consisted in papules, which did not develop into vesicles. It was distributed in three groups of firm papules in the course of the left posterior femoral cutaneous nerve; and as this takes its origin from the lumbar plexus, while the injection was in the domain of the sacral plexus, Touton argues that it was reflexly, and not directly, produced by the injection.

THE TRIUMPH OF NARROWNESS AT THE GERMAN HOSPITAL.

WE greatly regret to say that the very moderate demand of the active honorary medical staff of the German Hospital to be represented on the committee has, on a poll, been rejected by about two to one. We cannot believe that this triumph will be a source of lasting pride to those who have brought it about. It is a triumph of narrowness and illiberality, and shows an entirely inadequate conception of the obligation of the subscribers to the hospital to those who do its work and support its reputation. It shows besides a blindness to the uses of medical officers in administration in which from their special experience and their professional knowledge they could well and practically assist. There are only two consolations in such an event. The one is that, being wrong, it cannot express a permanent result; and the other that it is better for the interests of the hospital that the representation of the staff should wait than that it should be extorted by pressure and without grace or generosity.

STATISTICS OF YELLOW FEVER MORTALITY.

AT the Medical Congress which has recently been held in Cuba Dr. Weiss read an important paper on the statistics of yellow fever mortality. He pointed out the serious fallacies into which one may fall by judging of the efficacy of any treatment by the published mortality in any small number of cases, more especially when these are taken all together as they occur, perhaps in the course of one or two months. Not only is it important for scientific purposes to record a large number of cases spread over a lengthened period and embracing several outbreaks of the disease, but it is most necessary to state both the exact form the fever takes and the day on which treatment was commenced. As an example of the diversity of published death-rates, he mentioned that in the Hospital San Filipe y Santiago the mortality under Dr. Cabrera in July, 1882, was only 5 per cent., whereas in May and June of the same year it was as much as 45 per cent. A comparison made recently between the expectant method and Dr. Sternberg's antiseptic method, the cases being taken during the same epidemic, and being as nearly as possible equivalent to one another, resulted in an identical mortality in the two series—viz., 15 per cent. Regarding the antiseptic method, Dr. Weiss remarked that perchloride of mercury sometimes gave rise to hæmorrhage from the gums, to melæna, and to convulsions similar to those of Jacksonian epilepsy, and that doses of from one-seventh to one-fourth of a grain were insufficient for the purpose of antiseptic treatment; beta naphthol, too, though much less poisonous, has only a sixteenth of the antiseptic power of corrosive sublimate, and it is not well borne by the mucous membrane of the stomach. The mortality amongst the last 300 cases was 25 per cent., which was considerably lower than the rate for any former year, seeing that since 1882 it had ranged from 32 to 60. This improvement Dr. Weiss ascribed to the greater care taken of the cases, and to the intestinal tract having always been cleared the first or second day by emetics and purgatives.

EXCISION OF THE PATELLA.

IN the November number of the *Revue Médicale de la Suisse Romande*, Dr. E. Kummer, formerly assistant to Professor Kocher, contributes an interesting and successful case of extirpation of the patella. The patient, a woman aged twenty-five years, had suffered for three years from multiple abscesses around the patella. In June, 1889, Dr. Kummer excised this bone because it contained a tubercular deposit. The synovial membrane near it was healthy. In closing the wound the ligamentum patellæ was united with the fascia lata and the termination of the vastus internus. The leg was fixed upon Volkmann's excision splint, and in three weeks the wound had healed under a first dressing. In the following September this patient was shown at the Société Médicale de Genève. The woman could extend her leg almost to the normal degree; flexion was somewhat interfered with. This gradually improved. The woman can now walk four or five hours without limping or marked fatigue; she can kneel without pain, and walk up and down stairs like a healthy person. Dr. Kummer claims that resection of the patella may be practised without altering the power of walking or sensibly hindering the movements of the knee-joint.

THE ANTISEPTIC POWER OF COFFEE.

DR. LÜDERITZ has recently made a number of observations on the destructive power of coffee upon various microbes. He found that the organisms all died in a longer or shorter period—e.g., in one series of experiments anthrax bacilli were destroyed in three hours, anthrax spores in four weeks, cholera bacilli in four hours, and the streptococcus of erysipelas in one day. It was, however, remarkable that good coffee and bad coffee produced precisely similar effects. He believes that, as previous observers have suggested, the antiseptic effect of coffee does not depend on the caffeine it contains, but on the empyreumatic oils developed by roasting.

NERVOUS AFFECTIONS IN THE COURSE OF WHOOPING-COUGH.

DR. TROITSKI gives in a Russian journal a short summary of three cases of whooping-cough accompanied by mental disturbances, difficulty in or loss of speech, and loss of power, or even paralysis, of certain groups of muscles. The first case was that of a little girl two years old, who, during an attack of whooping-cough complicated by bronchitis, was seized after some paroxysms by distortion of the eyes, blindness, and contraction of the arm flexors, quiet delirium and widely distended pupils, Cheyne-Stokes breathing, diminution of the patellar reflex and of the sense of touch and of pain. At another time she became unconscious, and there were clonic contraction of the facial muscles, and staring eyes, the pupils being dilated and not insensitive to light. Soon afterwards a general eclamptic condition with Cheyne-Stokes phenomenon came on, the attack lasting for an hour and a half, and giving place to stupor which lasted twelve hours, and during which the child could see, but did not understand, and called things and people by wrong names. These attacks gradually diminished, and in two months she was convalescent. The second case was that of a boy three years and a half old, who had severe headache and difficulty in thinking and speaking during the fourth and fifth weeks of the whooping-

cough, which was complicated by pneumonia. His speech returned after three months, the whooping-cough lasting eight weeks. The hearing was much impaired. The third case was that of a little girl of seven months old, who in the fifth week of her illness had two eclamptic attacks; and in the sixth week impairment of power in the right arm, the deltoid being especially affected. The arm became quite paralysed after a fit of coughing. Dr. Troitski saw the child again after three months; the paralysis of the arm had disappeared without any treatment, the attacks of coughing having ceased when the arm became powerless. He considers that these conditions were due to disturbance of the circulation, and through that to morbid changes in some part of the brain.

OBSTETRICAL SOCIETY OF LONDON.

ON Wednesday evening this Society held its last meeting in Berners-street. The April meeting will be held in the Royal Medical and Chirurgical Society's rooms, 20, Hanover-square. Fellows of the Society should bear in mind that the library must be closed within a very few days, as it will shortly be removed from Berners-street to Hanover-square.

DRUNK OR DYING?

IT is notorious that very frequently deaths occur in police cells from apoplexy, fracture of the skull, and other grave conditions in cases of insensibility attributed to drunkenness. This mistake on the part of the police is not unnatural. The differentiation of comas is not so easy a matter, even to experts, as some would think. The mistake has been so often made that the police have a rule that in any but the clearest cases they are to send for a surgeon. We are sorry to see that Mr. Plowden, one of the police magistrates at West London, has expressed dissatisfaction with this action of the police. He thinks it is not fair that the prisoner, who turns out to have been only drunk, should have to pay a fee to a surgeon for coming to see him in the police cell. We entirely dissent from Mr. Plowden's opinion. If a man will put himself into such a position, the proper course is to take every care of him, including medical care, both of diagnosis and treatment. And it is altogether right that he and not the ratepayers should bear the cost. We can only hope that Mr. Plowden's remarks will not lead to a retrograde policy in this matter on the part of the police.

THE INTERNATIONAL MEDICAL CONGRESS.

THE Committee of Organisation of the forthcoming International Congress at Berlin have issued a circular calling attention to the "International Medico-Scientific Exhibition," which it is proposed to hold in connexion with the Congress. The exhibits are expected to include new or improved scientific instruments and apparatus, pharmacological and pharmaceutical preparations, plans and models of hospitals, convalescent homes, bath-houses, and new appliances for the care of the sick, &c. A special exhibition committee has been formed, and all information will be supplied by Dr. O. Lassar, Berlin, N. W. Carlstrasse, No. 19.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.

THE annual general meeting of the Irish Medical Schools' and Graduates' Association is to be held on Monday, March 17th (St. Patrick's Day), in Chandos-street, at 5 o'clock, when the thirteenth annual report will be received and other business transacted. In the evening the members and their friends will dine at the Holborn Restaurant at 7 o'clock, when Dr. George H. Kidd will preside. Tickets for the dinner may be obtained from Dr. W. H. White, Hon. Treasurer, 43, Weymouth-street, W., or from the Hon. Metropolitan Secretary.

FOREIGN UNIVERSITY INTELLIGENCE.

Berne.—Dr. Girard has been appointed Professor of Surgery.

Giessen.—Prof. Vossius of Königsberg has been appointed Professor of Ophthalmology, vice Prof. Hippels.

Heidelberg.—Dr. Herczel has qualified as *privat-docent* in Surgery.

Padua.—Dr. Tricomi of Rome has been appointed Professor Extraordinary of Surgical Pathology.

Tubingen.—Dr. Eugen Lellmann has been appointed Professor of Chemistry.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following distinguished members of the medical profession abroad have been announced:—

Dr. Arnold Cloetta, formerly Professor, first of Pathology and afterwards of Pharmacology, in the University of Zürich, at the age of sixty.—Dr. Paul Niemeyer of Berlin.—Dr. Litzmann, Emeritus Professor of Midwifery in Kiel, at the age of seventy-five.

WE understand that sanction has been given by the Postmaster-General to the creation of five medical districts in Birmingham, to each of which a medical officer has been appointed. These districts are as follows:—Head Office District (Five Ways), Thos. Nelson, Esq., M.D.; Aston Manor District, Hugh Wm. Thomas, Esq.; South-East District (Camphill), Geo. Hyde Melson, Esq., M.B.; North-West District (Great Hampton-street), Henry Samuel Cook, Esq.; Smethwith District, Messrs. Jackson and Jackson.

THE Senatus of the University of Edinburgh will, we learn, confer next month the degree of LL.D. upon Sir John Kirk, G.C.M.G., M.D, F.R.S., and Sir Dyce Duckworth, M.D., F.R.C.P.

WE regret to learn that Sir Richard Owen, K.C.B., F.R.C.S., F.R.S., who has attained the advanced age of eighty-five years, is in a very precarious state of health. We learn, however, at the last moment of going to press, that, in spite of his advanced age, hopes are entertained of his recovery.

Pharmacology and Therapeutics.

SALUFER PREPARATIONS.

WE have received from Messrs. Reynolds and Branson, Briggate, Leeds, specimens of their salufer cubes. These are made to facilitate the use of this antiseptic, and supply it in a portable form. One cube, dissolved in a quart of water, is used for dressings, or, used with a pint of water, makes a solution for washing the hands. Salufer has been highly spoken of by some as a non-toxic antiseptic and deodorant. The cubes are supplied in boxes, which can be carried in the waistcoat-pocket. The same firm make a salufer wool for employment with the solution; a layer of gauze, wet with the lotion, is placed over the wound, and over this the wool is applied. It is a cheap and satisfactory wool.

ARISTOL, A SUBSTITUTE FOR IODOFORM.

A new iodine derivative of thymol, has been patented and introduced as an iodoform substitute under the name of "aristol." It is said to be dithymol di-iodide, and is made by the addition of a solution of iodine in potassium iodide to a soda solution of thymol. A voluminous, red-brown, amorphous precipitate results, containing 45·8 per cent. of iodine. This is insoluble in water and in glycerine, slightly soluble in alcohol, and easily in ether and fixed oils. Aristol is said not to be poisonous, as it is not absorbed by the system. In the treatment of psoriasis it is claimed to act as favourably as chrysarobin, while it possesses the advantage of not causing the same intense colouration of the skin, or producing symptoms of conjunctivitis. It has also been

used for lupus, while its lightness renders it valuable as a dusting powder for wounds and burns.

INDICATIONS FOR THE USE OF ICHTHYOL.

Dr. Unna, editor of a German dermatological journal, was recently asked by an eminent university professor to mention the chief indications which he considers to be best fulfilled by the use of ichthyol. As it is but little known in this country, it may be said that it is prepared from a mineral oil obtained by distillation from certain mineral deposits consisting largely of fossilised fish. Ichthyol occurs in commerce in the form of a treacle-like fluid of somewhat disagreeable smell, which is readily soluble in water and miscible with fats of all kinds. Dr. Unna replies that, taking first diseases of special organs, the drug is most especially valuable in affections of the peripheral blood-vessels. In numberless cases of seborrhœa of the head and seborrhœic eczema of the face occurring in females, there is a waxy complexion, very pale lips and conjunctivæ, migraine, backache connected frequently with scanty and painful menstruation, constipation, great want of appetite, palpitation, lassitude, and abnormal desire for sleep, which is followed on awaking by headache and a feeling of fatigue. Here ichthyol administered internally for a considerable period produces a marked effect, not only rendering the skin clear, but making quite another being of the patient. Again, in the acne rosacea of elderly men who eat and drink too freely, and which is frequently associated with bronchial catarrh and emphysema, ichthyol reduces the peripheral hyperæmia and the catarrh. Amongst general diseases perhaps that in which ichthyol is most capable of being of service may be said to be rheumatism, including all the various forms that go by that name, from muscular rheumatism to rheumatoid arthritis. It is serviceable, too, in gastric catarrh of long standing and in bronchial asthma. It has also frequently been found that patients addicted to drink who were being treated with ichthyol for various skin diseases not only lost the alcoholic tremor, but began even to dislike spirits. This is a property which, as Dr. Unna suggests, is well worthy of the attention of alienist physicians and of those in charge of homes for inebriates.

ICHTHYOL IN CHRONIC BRIGHT'S DISEASE.

Blittersdorf and Lorenz having reported cases of nephritis which appeared to be benefited by the internal use of ichthyol, Professor Koshlakoff of St. Petersburg arranged to carry out a systematic examination of the effects of ichthyol on the urine and general condition of twelve patients suffering from chronic Bright's disease. The amount of albumen in the urine was regularly estimated both before the ichthyol was commenced and during the time it was being taken by means of Esbach's albuminometer. The results obtained showed that ichthyol is practically useless as a remedy in chronic nephritis, only one case out of the twelve appearing to be benefited by it, and several of the patients finding the drug so disagreeable that it had to be stopped.

PHENYL-HYDRAZIN DERIVATIVES AS ANTIPYRETICS.

Dr. Heinz, who has been engaged in the pharmacological laboratory of the University of Breslau under Professor Filehne, in preparing and examining a number of new phenyl-hydrazin derivatives, finds that they are all, in consequence of their tendency to act as blood poisons, entirely unsuitable for medicinal purposes as antipyretics. He consequently believes that antipyrin, which does not poison the blood, is not a phenyl-hydrazin derivative, although it is prepared from it by first acting upon it by acetic ether and then methylising the product. He suggests that an entirely new chemical body is formed, from which, rather than from phenyl-hydrazin, antipyrin must be considered a derivative.

THE THERAPEUTIC EFFECTS OF GRINDELIA ROBUSTA.

Professor Bufalini publishes in the *Internationale Klinische Rundschau* the results he has obtained from the administration of grindelia robusta in his clinic at Siena. He states that the drug has been used for some time past in America as an expectorant and in asthma, and preparations of the plant are incorporated in the Pharmacopœia of the United States. A complete analysis of grindelia robusta has never been published: yet Radenaker has extracted a terpene, which in odour resembles turpentine; a resin, which he calls "grindelin"; and some substance with an alkaline reaction, which has not been fully examined. Ayres and Gibbons were the first to make any practical use of the anti-asthmatic and antiseptic qualities of grindelia robusta in the treatment of the asthma of bronchial catarrh, when complicated with dyspnœa, and of vesical catarrh. Later on Bartholow and Buffington observed that grindelia was also useful in heart disease. In their experiments they succeeded in obtaining a diminution of the contractions of the heart, a rise of the blood pressure, and increased frequency of respiration. After the publication of these experiments, Dr. Dobroklonsky studied in the clinic of Professor Botkin the therapeutic virtues of grindelia in affections of the circulation of the blood, and he, too, found that the extract has very marked influence on the frequency of the systole. According to this author the best success is obtained in the treatment of heart disease by combining grindelia with adonis vernalis. Professor Bufalini has in the last two years repeatedly administered grindelia, and has in many cases of irregular, intermittent pulse obtained remarkable results with it. He therefore strongly recommends this drug in all cardiac affections in which a regulating effect on the heart's action and the restoration of an arhythmic pulse are indicated. The dose of the extract is from seven to fifteen grains.

THE RECENT RAILWAY ACCIDENT AT CARLISLE.

ON Tuesday morning a fearful railway accident occurred just outside the north end of the Citadel Station, Carlisle, resulting in the loss of four lives and serious injury to twelve passengers, and more or less slight injury to many others. No time was lost in sending for aid, and Dr. Lediard arrived in about twenty minutes. The services of two medical practitioners who were travelling in the train were fortunately available, and a large staff of porters, who were awaiting the arrival of the train, ran down in a body and worked with a ready will to help the sufferers. Three of the injured were taken to the Cumberland Infirmary, and the others to the County Hotel, where they were attended by Dr. Lediard and his assistant, Mr. Lloyd. The following cases were treated at the Cumberland Infirmary:—

T. R—— (the driver of the London and North-Western Railway train): Fractured ribs (uncomplicated). A. M——, aged sixteen: Simple fracture of both bones of the left leg, high up; fracture of both bones of the right leg at the same level, with very severe laceration of soft parts below the popliteal space; communication of wound with fracture not clearly established, but probable. In this case there was severe shock for the next twelve hours and much hæmorrhage had taken place prior to release from wreckage. Miss B——: Simple fracture of both bones of the right leg just above the ankle, with contusions and abrasions of face and head.

The following were removed to the County Hotel:—

Mr. H——: Pott's fracture of the right leg. This fracture was not discovered until the patient was in bed and his boots removed, the complaint having been of the pelvis in the first instance. Miss F——: Scratches and contusions of face; much shaken, and suffered from shock for some hours. Miss H——, who was travelling with Miss F——, received a contusion of the right eye, but was not otherwise hurt. Miss F——: Contusion of the left thigh and thorax. Was able to proceed on her journey the next day. Miss R——: Shock and general stiffness; retention of urine; abdominal pain and sickness. In this case there was suspected bruising of abdomen and possible lesion to viscera, but no shock or fever at present exist. Mrs. E——: Several cuts in the head and contusion of the right ankle. She suffered from shock. Several of the injured suffered from retention of urine and sleeplessness from vivid recollection of the accident.

The accident occurred at 3.30, and Dr. Lediard reached the station at 3.50 and Mr. Lloyd, his assistant, a few minutes after. All the injured had been released from the wreckage at 5.30, and at 6 o'clock Dr. Lediard was able to go to the infirmary and re-examine the three patients who had been removed. By the kind permission of the Matron, Miss Allen, one of the staff nurses was at once sent down to the County Hotel, and rendered important help in undressing the female patients and ministering to

their wants. In the train was Dr. Milne, of Accrington, Lancashire, whose wife stood beside the telescoped carriages, not knowing whether her husband was among the living or the dead. Dr. Milne escaped without a scratch, and after his liberation did all he could to assist. One of the slightly injured passengers who continued his journey was powdered with sawdust, the result of the process of excavation, but his niece was amongst the dead. The dark morning, and the numerous rails, wires, and signal rods retarded the removal of the injured. There can be no doubt that railway stations should be supplied with not only a wheeled litter and a hand stretcher, but a supply of light stretchers, as much time would be saved by such provision, and the removal of the injured would become an easy matter.

HEALTH OF BRITISH GUIANA IN 1888.

THE report of the Surgeon-General of British Guiana for 1888 treats chiefly of the sickness and mortality as shown by the returns of the various hospitals in the colony, but does not give any particulars as to the general population. In the beginning of the year a few cases of yellow fever occurred, but the disease did not spread. Measles was very prevalent during part of the year, but was of a mild type. As usual, malarial fevers were the chief cause of admissions to the hospitals, but the death-rate from them was very low. Vaccination appears to be very much neglected. The report of Mr. Castor, medical superintendent of the General Leper Asylum, Mahaica, furnishes some interesting information respecting the prevalence of the disease in the colony, and the unsatisfactory arrangements connected with it, both as regards the unfortunate patients and the means authorised for the repression of the disease. At the beginning of the year there were 365 inmates in the asylum—268 males and 77 females; and during the year 66 males and 16 females were admitted. The daily average number was 363, of whom 290 were males; and of these 31 males and 11 females died, making a total of 42, or 11·57 per cent. Compared with the numbers in 1877, there is an increase of the inmates amounting to 63 per cent., and a decrease in the death-rate of about 2 per cent. The asylum appears to be much overcrowded, badly constructed, and some parts of it greatly in need of repairs. But the point on which reform seems most imperatively demanded is discipline. Mr. Castor complains that he has no means of enforcing this; that while there are stringent orders against the inmates leaving the grounds without written permission, there is no punishment attached to a breach of these orders. The result naturally is that "the inmates leave the institution whenever they feel inclined, stay out and return to suit their pleasure. No punishment that I can inflict will meet cases such as these, and when one does this with impunity, others are tempted to follow the example. ..... I cannot see why it should be imagined possible that these people here can be managed without practically any means of doing so, while in the sister colony of Trinidad means are adopted, such as light and dark cells, and troublesome inmates discharged." It seems very clear that the medical superintendent should have power to order suitable punishment in all cases of disobedience or insubordination, a record being kept of these for the information of the colonial authorities. Certain alterations would be necessary to enable him to check the practice of the inmates going out at night, but this would be more than compensated by the improved discipline. Mr. Castor also complains of the laxity of the police in taking no notice of the lepers when seen out of bounds; a little strictness on their part would tend to reduce the offence.

Although every remedy reported successful elsewhere has been tried, no beneficial result has been obtained. Mr. Castor holds the opinion that the most that can be done in the way either of cure or prevention is "by proper diet, dwellings, and sanitary surroundings to ameliorate the symptoms, and often thereby control them." The unsatisfactory condition of the lepers in British Guiana will, we trust, meet with attention from the medical adviser of the Colonial Office and from the Committee of the Father Damien Fund.

A DIET OF LEAN MEAT AND WATER.

MR. EDWIN C. ASPINALL, general superintendent of the American Mission to Tierra del Fuego, in a letter dated Ooshooia, Tierra del Fuego, Dec. 28th, 1889, writes to us on the above subject as follows:—

"In my copy of THE LANCET for Nov. 9th I see a paper written by Dr. George Herschell entitled 'Effect upon the Human Body of a Diet composed entirely of Lean Meat and Water,' which draws some conclusions from the *abnormal conditions* under which a poor unfortunate party of Ona natives from Tierra del Fuego are suffering, which are so contrary to the natural habits of the Onas that I venture to write and contradict them. I am at present a missionary to these people. Before leaving England I studied medicine at one of our largest London hospitals. Dr. Herschell says: 1. These people 'have lived all their lives on nothing except lean meat, fish, and water.' I beg to say that all the Onas living in Tierra del Fuego, although their chief diet is the 'guanaco' (which, by the way, at certain seasons of the year is fat), also feed largely on berries of the berberis and balsam, wild celery, dandelion roots, and fungi; also enormous quantities of the mussel and other shell-fish, and fish from which they express much oil, which they drink and also anoint their bodies with; also birds of different kinds—the goose, duck, teal, and their eggs. 2. They are a 'family of cannibals.' They are not, and never have been. My predecessor, the Rev. T. Bridges—who has lived with the Yahgan tribe over twenty years and knows their language perfectly, has made many and strict inquiries among the four tribes who inhabit Tierra del Fuego, and speak different languages (viz., Yahgan, Ona, Alaculoof, and Chonas) by means of native interpreters, and has moved freely among them—can find no trace of cannibalism, not even by tradition. 3. They 'take little or no exercise.' They are most active, running with great speed, constantly hunting, using the bow and arrow and sling with great skill, rarely stopping long in one place, and travel long distances. 4. They spend most of their time in sleep. I have slept in the wigwam with members of the Yahgan tribe—whose habits are very similar to the Onas, only that they have canoes and live more on the water—and can testify that they sleep less than we do, constantly rising in the night to cook and eat mussels. 5. 'Amongst these man-eaters gout is unknown.' Possibly so; but no one with any medical training, except casual visitors, before I came to this country three years ago has ever studied them, and so far I have only had opportunity with the Yahgan tribe."

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Caxton and St. Neots Districts.—The special characteristics of these three rural and urban districts are dealt with for the year 1889 both collectively and separately. As regards the area as a whole, improvements in water-supply have been effected, but in many of the more sparsely populated localities the supply is still deplorable both as to quality and quantity, and it seems clear that the subsoil is in places too polluted properly to admit of the retention of surface wells. Efforts are being made towards the abolition of the common midden-privies, various forms of pails and dry closets being substituted as occasion offers. The death-rates per thousand from all causes during 1887 were—for St. Neots rural district, 13·52; Caxton and Arrington rural district, 12·18; and for St. Neots urban district, 12·05. These rates are low, but having regard to the many causes of danger to health which still prevail in the combined area, Mr. Poyntz Wright urges the sanitary authorities to remember that such rates by no means necessarily imply satisfactory sanitary circumstances. Adverting to the adoption by two of the sanitary bodies of the Infectious Diseases (Notification) Act, Mr. Wright points out that, even in the absence of an isolation hospital, the provision of which he has consistently maintained, there is some

valuable work to be done in connexion with school attendance, school closure, &c., to give noteworthy effect to the knowledge acquired under the Act. In conclusion, Mr. Wright recalls our recent leading article on "The Public Health Service," and aptly illustrates one of our points by a reference to his own case. He has a district covering 175 superficial miles, and containing a population of 29,320; he is debarred from private practice, and has to bear all the expense of travelling during his work, and yet his remuneration amounts only to £237 per annum. Mr. Wright's reports alone show how his services altogether exceed that which should be expected for the salary attached to them.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5764 births and 4777 deaths were registered during the week ending March 1st. The annual rate of mortality in these towns, which had been 25·3 and 25·1 per 1000 in the preceding two weeks, rose last week to 25·8; the rate was 21·3 in London and 29·3 in the twenty-seven provincial towns. During the first nine weeks of the current quarter the death-rate in the twenty-eight towns averaged 25·3 per 1000, and was 2·3 above the mean rate in the corresponding periods of the ten years 1880–89. The lowest rates in these towns last week were 16·5 in Cardiff, 17·9 in Leicester, 18·1 in Brighton, and 21·3 in London and in Nottingham. The rates in the other towns ranged upwards to 36·5 in Leeds, 40·7 in Manchester, 43·1 in Preston, and 43·7 in Bolton. The deaths referred to the principal zymotic diseases, which had been 419 and 371 in the preceding two weeks, were last week 379; they included 168 from whooping-cough, 62 from measles, 43 from scarlet fever, 38 from diarrhœa, 36 from diphtheria, 32 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was recorded during the week in Birkenhead, while they caused the highest death-rates in Leeds, Bolton, and Blackburn. The greatest mortality from whooping-cough occurred in London, Manchester, Brighton, Leeds, Bolton, and Bristol; and from measles in Liverpool. No marked excess of scarlet fever or of "fever" mortality was recorded in any of these great towns. The 36 deaths from diphtheria in the twenty-eight towns included 24 in London, 3 in Salford, and 2 in Liverpool. No death from small-pox was registered in any of the twenty-eight great towns. Five cases of this disease were under treatment on Saturday last in the Metropolitan Asylum Hospitals, and not one in the Highgate Small-pox Hospital. The number of scarlet fever patients in the Metropolitan Asylum and London Fever Hospitals further fell last week to 1222; 88 cases were admitted to these hospitals during the week, against 63 and 89 in the previous two weeks. The deaths referred to diseases of the respiratory organs, which had been 439 and 452 in the preceding two weeks, further rose last week to 492, and exceeded the corrected average by 7. The causes of 102, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Plymouth, Derby, Birkenhead, Halifax, and Cardiff; while the largest proportions of uncertified deaths were registered in Blackburn and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 28·7 and 28·3 per 1000 in the preceding two weeks, further declined to 26·9 in the week ending March 1st; this rate exceeded by 1·3 that which prevailed during the same week in the twenty-eight English towns. The rates in the eight Scotch towns ranged from 17·7 in Greenock and 22·5 in Leith, to 27·9 in Dundee, 28·1 in Glasgow, and 36·0 in Paisley. The 697 deaths in the eight towns showed a decline of 35 from the number in the previous week, and included 53 which were referred to whooping-cough, 24 to measles, 6 to diphtheria, 6 to diarrhœa, 4 to "fever" (typhus, enteric, or ill-defined), 4 to scarlet fever, and not one to small-pox. In all, 97 deaths resulted from these principal zymotic diseases, against 95 and 100 in the preceding two weeks. These 100 deaths were equal to an annual rate of 3·7 per 1000, which exceeded by 1·7 the mean rate last week from the same diseases in the twenty-eight English towns. The highest death-rates from these diseases last week were 4·9 in Paisley and 7·3 in Leith. The fatal cases of whooping-cough, which had been 29 and 42 in the previous two weeks, further rose last week to 53, and included 27 in Glasgow, 11 in Edinburgh, 7 in Dundee, 4 in Aberdeen, and 3 in Paisley. The 24 deaths from measles corresponded with the number in the preceding week; 13 occurred in Glasgow, 6 in Edinburgh, and 4 in Leith. The fatal cases of diphtheria, which had been 7, 8, and 11 in the previous three weeks, declined to 6 last week, of which 2 were returned in Glasgow and 2 in Leith. The 4 deaths referred to "fever" showed a decline of 4 from the number recorded in the preceding week, and included 2 in Leith. Of the 4 fatal cases of scarlet fever, 2 occurred in Glasgow and 2 in Leith. The deaths referred to diseases of the respiratory organs in the eight towns, which had been 195 and 205 in the preceding two weeks, were last week 201, and exceeded by 62 the number returned in the corresponding week of last year. The causes of 87, or more than 12 per cent., of the deaths in the eight towns were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 37·8 and 35·3 per 1000 in the preceding two weeks, further declined to 30·7 in the week ending March 1st. During the first nine weeks of the current quarter the death-rate in the city averaged 39·6 per 1000, the mean rate during the same period being 25·1 in London and 26·9 in Edinburgh. The 208 deaths in Dublin last week showed a further decline of 31 from the numbers in the preceding two weeks; they included 9 which were referred to "fever" (typhus, enteric, or ill-defined), 8 to whooping-cough, 3 to measles, 1 to diarrhœa, and not one either to small-pox, scarlet fever, or diphtheria. Thus the deaths from these principal zymotic diseases, which had been 12 and 14 in the preceding two weeks, further rose last week to 21; they were equal to an annual rate of 3·1 per 1000, the rate from the same diseases being 2·1 in London and 3·5 in Edinburgh. The fatal cases of "fever," which had been 5 and 6 in the preceding two weeks, further rose last week to 9; and the deaths from whooping-cough rose from 4 to 8. The three deaths from measles corresponded with the number in the previous week. Two inquest cases and 2 deaths from violence were registered; and 73, or more than a third, of the deaths occurred in public institutions. The causes of 24, or nearly 12 per cent., of the deaths in the city were not certified.

THE SERVICES.

ADMIRALTY.—The following appointments have been made:—Surgeons Edward B. Townsend and Francis Woore to the *Victoria* (dated Feb. 19th, 1890); Surgeon Gilbert Kirker to the *Indus;* Surgeon Thomas C. Rowland, M.B., to Haslar Hospital (dated Feb. 19th, 1890); Shuldham Henry Dunlop, M.D., to be Surgeon and Agent to Cultra (dated March 1st, 1890); and Harold Scurfield, M.D., to be Surgeon and Agent at Sunderland (dated Jan. 31st, 1890).

VOLUNTEER CORPS.—*Artillery:* 4th Lancashire: Acting Surgeon T. B Grimsdale, M.B., to be Surgeon (dated March 5th, 1890).—*Rifle:* 1st Volunteer Battalion, the Royal Warwickshire Regiment: Acting Surgeon G. J. Lloyd, M.B., resigns his appointment (dated March 5th, 1890).—4th Volunteer Battalion, the King's (Liverpool Regiment): Acting Surgeon W. S. Limrick to be Surgeon (dated March 5th, 1890).—2nd Volunteer Battalion, the Prince Albert's (Somersetshire Light Infantry): Acting Surgeon J. Meredith, M.D., to be Surgeon (dated March 5th, 1890).—2nd Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Acting Surgeon W. T. Colby, M.D., to be Surgeon (dated March 5th, 1890); Surgeon W. T. Colby, M.D., to be Surgeon-Major, ranking as Major (dated March 5th, 1890).—5th (Isle of Wight, Princess Beatrice's) Volunteer Battalion, the Hampshire Regiment: Acting Surgeon G. A. Barr resigns his appointment (dated March 5th, 1890).—2nd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Surgeon G. H. Cable resigns his commission (dated March 5th, 1890).—2nd Volunteer Battalion, the Prince of Wales's Volunteers (South Lancashire Regiment): Acting Surgeon F. J. Knowles to be Surgeon (dated March 5th, 1890).—1st (Renfrewshire) Volunteer Battalion, Princess Louise's (Argyll and Sutherland Highlanders): Alexander Peacock, M.B., to be Acting Surgeon (dated March 5th, 1890).

Correspondence.

"Audi alteram partem."

THE HYDERABAD CHLOROFORM COMMISSION.

To the Editors of THE LANCET.

SIRS,—The importance of the issues at stake seems to render it incumbent upon everyone who has special opportunities for observing the action of anæsthetic agents to record his opinion concerning the results of the Hyderabad Commission. Many of the conclusions arrived at are of the utmost importance, and our best thanks are due to the Commission for bringing these prominently under notice. I allude more particularly to the influence of asphyxial conditions, the previous exhibition of certain drugs, hæmorrhage in considerable degree, and the position of the animal anæsthetised. On the other hand, there are many points for the final settlement of which we had all looked forward with the greatest interest to the experiments of the Commission, but in which we are, if anything, in a more uncertain position than before.

In the first place, it is unfortunate that all the evidence as regards the occurrence of primary syncope is negative, and one cannot help feeling that, even were the instances considerably multiplied, there still would be no certainty that the next experiment might not prove the exception to the rule. And if we are not justified in arriving at a dogmatic conclusion in the case of the lower animals, how much less are we warranted in applying the same conclusion to the human subject. The records of clinical experience, in fact, stand confronted with the results of laboratory experiment, and I think that everyone will allow more weight to one positive instance occurring in the former than even to thousands of negative instances in the latter. It is well known that many of the cases which have suddenly terminated fatally, or shown signs of serious cardiac failure during the administration of chloroform, come under a certain category, including forcible dilatation of the sphincter ani and other operations which I need not here specify. Other fatal results have occurred during the performance of trivial operations where the action of chloroform has admittedly not been carried to complete narcosis. Now, although there may be some difficulty in attributing the precise cause in each individual case, whether an overdose of the drug suddenly applied in order to check movement, or whether a reflex inhibition of the heart in consequence of incomplete anæsthesia, there can be no doubt as to the symptoms observed—viz., sudden pallor and failure of pulse, almost coincident with the commencement of operation, and in many cases absolute failure of all means of resuscitation, although promptly applied. Now, on referring to the experiments made upon the lower animals in this connexion, we find that, although all the operations associated with shock and cardiac failure were performed in all stages of chloroform administration, yet there was nothing beyond a slight variation in blood pressure to indicate anything approaching syncope or cardiac failure. Evidently, therefore, in this matter we stand face to face with a serious dissimilarity between the conditions as occurring in the human subject and in the lower animals respectively, and yet, on turning to the practical conclusions deduced from the experiments of the Commission, we find it recommended that, "as a rule, no operation should be commenced until the patient is fully under the anæsthetic, so as to avoid all chance of death from surgical shock or fright." With the conclusion I think most chloroformists will agree, but not with the method of arriving at it; and I maintain that if we followed the indications furnished by laboratory experiments in this instance we should be led into grievous error.

On making a general survey of the experiments as reported we cannot help being struck by one very important fact—viz., the uniformity with which the various phenomena presented themselves in each series, even in those purposely complicated for special objects. In other words, the percentage of typical cases is very large, and contrasts markedly with what is observed in the human subject, where the typical form is comparatively uncommon, but is nevertheless, when it occurs, recognised as the normal and made the point of departure for the consideration of all others. It is chiefly on this account that I feel I must disagree with the statement of the Commission that, if the rules laid down be followed, "chloroform may be given in any case requiring an operation with perfect ease and absolute safety." The public, who are our judges if anything goes amiss, will—nay, already have supplied the words "by anyone, experienced or inexperienced," and this idea, if allowed to gain acceptance, will, I am afraid, be fraught with disaster. Even assuming for the moment that primary cardiac failure never occurs in the human subject, cases are continually presenting themselves where the respiratory signs need the closest watchfulness. Clinical experience shows us that shallow breathing occurs at the two ends of the scale. On the one hand, when the subject is deeply under the influence of chloroform; on the other, when he is entering or emerging from its influence. In our typical cases the interval between the two is well marked, and the two conditions are easily distinguishable; but in others, not at all infrequent, the interval is so small and so slightly marked that it may be bridged over by a minute dose of chloroform, or even by a mere alteration of position in the patient. It is here that even the experienced administrator might be led into a fatal error if he trusted entirely to the ill-defined signs furnished by the respiratory function, and it is only by a careful attention to the important indications yielded by the pulse, the pupil, the conjunctival reflex, the colour, and temperature of the skin that he is able to conduct his patient safely through a truly perilous journey. I cannot conclude this letter without heartily endorsing every word in Dr. Hewitt's valuable letter on the same subject. I have myself notes of at least two cases in which, during complete and satisfactory chloroform narcosis, and without hæmorrhage of any importance, there was a rapid fall in the volume and tension of the pulse, attended with blanching of the lips and coldness of the surface, without any preliminary alteration in the depth or frequency of respiration. Whatever the exact cause may be, there can be no doubt that during the administration of chloroform we must always be prepared for such an occurrence, whereas with ether we may practically disregard its possibility. The duty of the anæsthetist during the performance of a surgical operation on the human subject must be regarded as a highly complicated one, and I am of opinion that the most reliable administrator is the one who, automatically, as it were, is at all times in full possession of the general condition of his patient, keenly alive to all the indications presented to him, however trivial, and at once prepared to regulate his procedure accordingly.—I am, Sirs, yours obediently,

CHARLES E. SHEPPARD,
Second Chloroformist to the Middlesex Hospital; Anæsthetist to Guy's Hospital (Dental School).
Welbeck-street, Cavendish-square, W., March 4th, 1890.

"A THERAPEUTICAL PARADOX: ACTION OF EXPECTORANTS."

To the Editors of THE LANCET.

SIRS,—Will you permit me to tender my best thanks to Professor Gairdner for the kind and courteous manner in which he speaks of my recent work on "Chronic Bronchitis and its Treatment"? I fear, however, that I cannot take credit for the theory which he criticises of the mode of action of certain expectorants. Dr. Lauder Brunton, in his classical work on Pharmacology, divides this group of agents into Depressing Expectorants, "generally tending to depress the heart, lessen blood pressure, and increase secretion," and Stimulating Expectorants, "generally stimulating the heart, increasing blood pressure, and diminishing secretion"; and the same classification in very similar terms is to be found in kindred works on the subject. I regret that, so far, I have been unable to obtain a copy of Professor Gairdner's paper in the *Glasgow Medical Journal*.

As reference has been made to the value of apomorphine as an expectorant, I may mention that I have employed it this winter in very many cases of chronic bronchitis with the most satisfactory results. I give it in doses of a tenth of a grain every three or four hours, usually with syrup of tar or syrup of Virginian prune. I often prescribe the tenth of a grain of hypodermic tabloids of apomorphine as cough lozenges. In this dose, given by mouth, it never excites vomiting, and very rarely nausea. The great bar to its general acceptance as an expectorant is that there is a deep-

rooted impression that it is an emetic and nothing else. I should be the last to under-estimate its value in producing emesis when given hypodermically, but undoubtedly its chief use is as an expectorant. The only preparation in the British Pharmacopœia—the injectio apomorphinæ hypodermica—is not only inadequate, but is positively misleading. The directions that "it should be made as required for use" are absurd on the face of it. An emetic, to be of any use in cases of poisoning, must be at hand, or it is valueless. The physician cannot afford to waste time weighing out so many grains of hydrochlorate of apomorphine and dissolving them in so many minims of camphor water, when every moment may mean the difference between life and death. The composition of this ill-conceived preparation should be altered at the earliest possible opportunity. I trust that in the forthcoming addendum to the Pharmacopœia we shall have for use in expectorant mixtures a one per cent. liquor apomorphinæ made with hydrochloric acid and chloroform water. How apomorphine acts as an emetic is a moot point; but Schmiedeberg's explanation pretty well sums up the present state of our knowledge. He says: "Small doses of emetics of every kind are used as so-called expectorants in diseases of the lungs, and especially in bronchial catarrh, for the purpose of easing the removal of the tough mucus by coughing and hawking. In this way the impulse to cough is alleviated, and that quiet is produced which is necessary to the cure of the morbid mucous membrane."

A few months ago Dr. Walshe kindly suggested that I should try copaiba in the treatment of chronic bronchitis. I have used it extensively, and find that it is a good and reliable expectorant. It has, however, this grave disadvantage, that in a large proportion of cases it brings out an eruption attended with intense itching, and often accompanied by sore-throat, diarrhœa, and vomiting. These cases have been seen by my colleague, Dr. Colcott Fox, who has made some valuable observations on the subject. Copaiba as an expectorant is probably allied in mode of action to cubebs, which, as Dr. George Bird points out, is best administered by adding a teaspoonful of the tincture to a cup of hot linseed-tea, and directing the patient to sip it slowly night and morning. The theory of the action of expectorants in the treatment of winter cough is of great practical interest, and this will, I trust, prove a sufficient apology for these scattered remarks in reply to Professor Gairdner's valuable observations.

I am, Sirs, yours faithfully,

Weymouth-st., W., March 5th, 1890. WILLIAM MURRELL.

To the Editors of THE LANCET.

SIRS,—Professor Gairdner commends his own theory on the action of expectorants to the readers of THE LANCET, and attacks Dr. Murrell's theory as "a curious, antiquated, doctrinal paradox." So do most of us commend our own theories, right or wrong, to the acceptance of others. Nothing is easier than to do so. Professor Gairdner, fired as he is with scientific ardour, is not to be seriously blamed for asserting himself, and insisting that we take our cue from what he placidly calls his consistent theory—which, by the way, he admits to be a quarter of a century old. I go all lengths with him in commending ourselves and our theories to the acceptance of all and sundry, in pitchforking the one and the other on the multitude if he will. But the line must be drawn somewhere, and I take leave to question whether we are morally justified in going a step further, whether we do not lay ourselves open to blame and censure in scoring off another man's reputation by calling his theory curious and antiquated, and characterising our own as consistent. Under any circumstance, I think all will agree that such a course is as remarkable as it is unusual, and as egotistical as it is primitive.

It is much to be regretted that Dr. Murrell, in his little book on "Chronic Bronchitis and its Treatment," enunciated certain theories relative to the action of expectorants to the exclusion of Professor Gairdner's views. We can sympathise with Professor Gairdner under the circumstances, and easily understand his chagrin and surprise on finding himself left out in the cold. One cannot afford to be slighted and passed by unnoticed, more especially in these days in which we live, when no one ever thinks of hiding his light under a bushel. We all know the different theories relative to the action of expectorants, and one theory is perhaps as good as another. Theories are human, but facts are divine. We must possess our souls in patience, seek after facts, and follow truth wherever it leads us.

I am, Sirs, yours obediently,

Alexander-square, S.W., March 3rd, 1890. D. MACKINTOSH.

THE DISTRIBUTION OF THE LEPROSY BACILLUS.

To the Editors of THE LANCET.

SIRS,—In connexion with Dr. Wynne's interesting paper on this subject, in THE LANCET of Jan. 4th, 1890, it may be worth while to publish two tables, which appeared in my report to the Government on the Trinidad Leper Asylum for 1887, but which have not yet been published in any medical journal.

These figures are derived from the examination of tissues obtained from thirty-eight necropsies made during 1886 and 1887. It will be noticed that only in three instances were bacilli found in the viscera of anæsthetic cases—twice in the liver and once in the spleen. In these tables the distribution of bacilli in cutaneous tubercles or other

Table showing the relative occurrence of Bacilli in Viscera.

	Numerous.								Generally diffused.								Few.								Grand total.
	Tub.		Anæsth.		Mixed.		Total.		Tub.		Anæsth.		Mixed.		Total.		Tub.		Anæsth.		Mixed.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Liver	1	—	—	—	1	—	2	—	1	1	1	—	2	—	4	1	1	—	1	—	2	—	4	—	11
Spleen	1	—	—	—	2	—	3	—	1	1	1	—	1	—	3	1	1	—	—	—	3	—	4	—	11
Testes	1	—	—	—	—	—	1	—	—	—	—	—	1	—	1	—	1	—	—	—	1	—	2	—	4
Kidney	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	1	—	1	—	2
Intestine	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1	—	—	—	—	—	1	—	2
Lung	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	1	—	1	—	2
Total	3	—	—	—	3	—	6	—	2	3	2	—	6	—	10	3	4	—	1	—	8	—	13	—	32

Table showing the relative occurrence of Bacilli in other parts.

	Numerous.								Generally diffused.								Few.								Grand total.
	Tub.		Anæsth.		Mixed.		Total.		Tub.		Anæsth.		Mixed.		Total.		Tub.		Anæsth.		Mixed.		Total.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Femoral gland	3	2	—	—	2	—	5	2	1	1	1	—	2	—	4	1	2	—	—	—	2	—	4	—	16
Larynx	2	—	—	—	5	—	7	—	1	1	—	—	2	—	3	1	—	—	—	—	—	—	—	—	11
Median nerve	1	—	1	—	1	—	3	—	—	—	2	—	1	—	3	—	—	—	2	—	—	—	2	—	8
Sciatic nerve	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Ulnar nerve	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
Superior cervical ganglion	—	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Mesenteric gland	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	—	1	1	2
Tongue	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1
Total	6	2	2	—	8	—	16	2	2	2	3	—	5	—	10	2	2	2	2	—	5	—	9	2	41

leprous affections of the skin has been purposely omitted. This was dealt with in a paper published in the *British Medical Journal* for Feb. 5th, 1887, p. 276.

Like Dr. Wynne and other writers, I have often found leprosy bacilli in cells as well as free.[1] I have always failed to find them in anæsthetic patches and ulcers, in necrosed bone, or in the blood. In only two instances were they found in the kidney. During the last six years I have made ninety-three necropsies on lepers at the Trinidad Asylum, and 788 examinations of viscera and other tissues for leprosy bacilli, so that experience is still accumulating, and I hope to tabulate it further before long.

One point comes out very clearly from the tables published so far—that the bacilli are far more widely distributed in the tuberculated and mixed forms than in the anæsthetic; indeed, in the latter it is very rare to find them anywhere but in the median nerves.

I am, Sirs, yours faithfully,

Trinidad, Jan. 26th, 1890. BEAVEN RAKE.

TREATMENT OF VITREOUS OPACITIES.

To the Editors of THE LANCET.

SIRS,—In your last issue is a paper by Mr. Vernon Ford on a new form of treatment for vitreous opacities. While admitting the difficulties in the way of curing such cases, many points occur to one in considering the somewhat heroic treatment proposed and practised by Mr. Ford. In the first place, I understand he proposes to evacuate the whole vitreous, a small quantity at a time, by successive punctures with a trocar. This alone must be a very difficult proceeding, for unless the vitreous were very fluid, it would be difficult to get it to flow along a fine trocar, and then the tendency would be for the opacities, which are often large and membranous, to remain behind. Secondly, vitreous is never re-formed, but its place may be taken by freshly effused serum, which may at first be transparent, and so vision may be slightly improved for a short time. In the case quoted useful vision was not obtained, although there was some improvement. Then it would be essential to know the condition of the eye at the end of twelve or eighteen months, and I should venture to predict that at the end of that time Mr. Ford will have a case of a shrinking eye without any vision at all. I have lately been treating cases of vitreous opacities with subcutaneous injections of pilocarpine. In two cases great improvement took place, while in others the result has seemed *nil*.

I am, Sirs, yours faithfully,

GUSTAVUS HARTRIDGE, F.R.C.S.,

Surgeon to the Royal Westminster Ophthalmic Hospital &c.

Green-street, Park-lane, W., March 5th, 1890.

AFFECTIONS OF THE MIDDLE EAR DUE TO INFLUENZA.

To the Editors of THE LANCET.

SIRS,—Several cases of otitis media due to influenza have lately come under my notice. They are of such an unusual and typical nature that it may be of some interest to record them. I should like to divide the cases into two classes—i.e., those cases which come on at the same time as the influenza and those which come on a week or ten days later. The symptoms are the same in most respects, except that in those cases which come on at the same time as the influenza the pain is perhaps more severe, more intermittent, the general prostration greater, and the duration of deafness shorter than in those cases which come on after the influenza. The symptoms of ordinary otitis media and those of otitis media due to influenza are in many respects quite different. In the latter the pain comes on more suddenly, and is more of a neuralgic nature. The pain is distinctly intermittent, and worse at night, when the attacks are more frequent and last longer than at daytime. The pain does not at all correspond to the objective symptoms. In fact, there is that marked incongruity between the objective and the subjective symptoms which is so very characteristic of all cases of influenza and of their complications. There is little or no relief after the artificial or natural perforation of the drum-head, which is invariably the case in cases of ordinary otitis media. The deafness comes on gradually for a few days, is then usually well marked, and lasts in most cases at least two or three weeks, sometimes much longer. There is great nervous prostration, which lasts for some weeks, the patient is very nervous and excited, and cannot sleep. The drum-head is intensely red, swollen, and in some cases there is distinct extravasation of blood. There is never much serous or purulent discharge, sometimes very little indeed. The mucous membrane of the middle ear is very much swollen, and, in many cases, granulations or polypi form. This accounts for the fact that Politzer's method does not relieve the deafness, and also that the deafness often lasts for a long time after the other symptoms have apparently all disappeared. There is never that peculiar œdematous swelling of the mastoid process which is so frequently seen in the ordinary otitis media. The mastoid process is in some cases intensely painful on pressure. In two cases the external meatus was swollen, but not painful.

As regards treatment, I should, as far as my small experience goes, recommend the daily application of two leeches, one in front of the tragus and one on the mastoid process; hot antiseptic fomentations; no poultices. Cocaine ear drops (10 per cent.) seem to give more relief than glycerine of carbolic acid, which is so very useful in ordinary cases of otitis media. If the pain and deafness last longer than a few days, I should recommend a very large incision to be made in the drum-head. This not only relieves the local hyperæmia, giving free exit to any exudation, but also permits of the local application of astringents to the mucous membrane of the middle ear. On this latter point I should like to lay particular stress. Nitrate of silver drops (10 per cent.) seem to act better than chromic acid, spirit of wine, alum, zinc, &c. In two cases I used insufflations of iodoform and cocaine, and with good results. Antipyrine or small doses of morphia help to relieve the pain. In some cases large doses of sulphate of quinine gave much relief. Politzer's method ought never to be used till the pain has ceased, and then it does not seem to be of much use. The peculiarities of these cases seem to be: (1) The marked incongruity between the subjective and objective symptoms; (2) the sudden, often very acute, and invariably intermittent pain; (3) the peculiar redness and well-marked swelling of the drum-head, and also of the mucous membrane of the middle ear; (4) the fact that the artificial or natural perforation of the drum-head fails to relieve the pain or deafness; (5) the small amount of secretion; and (6) the fact that the deafness gradually increases for two or three days, and then persists often for several weeks, long after all other marked symptoms have disappeared.—I am, Sirs, yours obediently,

ADOLF BRONNER, M.D.,

March, 1890 Surgeon, Bradford Eye and Ear Hospital.

CHEYNE-STOKES RESPIRATION.

To the Editors of THE LANCET.

SIRS,—Dr. Stephen Mackenzie asked last week, at the Clinical Society's meeting, *apropos* of Dr. Samuel West's case of Cheyne-Stokes respiration, whether any observer had known a case in which this phenomenon was developed to recover.

I saw recently, in consultation with Mr. W. H. Rean of Brighton, a lady, slight, delicate, and asthmatic, aged sixty-six years, who was suffering from influenza and broncho-pneumonia at the base of the left lung. The patient was thought to be dying. Delirium had been succeeded by drowsiness, alternating with periods of some mental activity. The right side of the heart was evidently much loaded, and the heart's action exceedingly irregular and jerky, but without bruit, temperature hypo-normal. The hands were chilly and perspiring, the lips purplish red, the power of swallowing was almost lost, cough was feeble, and expectoration, lately abundant, had ceased; the general aspect betokened approaching dissolution. The respiration, which was attended with a rattling noise from mucus in the throat, and which had been irregular and laboured, assumed and retained during one night the Cheyne-Stokes type. The acts were shallow, brief, about 40 to the minute, and of diminishing force, until a pause came lasting several seconds (perhaps ten); after this the breathing recommenced slowly. During the pause the pulse was unaltered, its rhythm being throughout very irregular, and the rate about 120 to the minute. The pauses varied in frequency, sometimes only six respirations came between them, sometimes much more. There was no apparent alteration of

[1] Path. Soc. Trans., vol. xxxviii., p. 439.

pupil. From this condition the patient recovered and has become fully convalescent, her recovery being attributable less, I think, to the digitalin, fresh infusion of digitalis, &c., administered, than to the gradual drying of the lungs by evaporation as she lay many hours almost without food or liquids, so that the heart was eased of its burden. The pulse, at last account 70 to the minute, was still somewhat irregular. I may add that the urine is found free from albumen or sugar, weakly acid, specific gravity 1009 only.

I am, Sirs, yours truly,

Finsbury-square, March 3rd, 1890. R. HINGSTON FOX.

"QUOTATIONS" BY QUACKS.

To the Editors of THE LANCET.

SIRS,—My attention has been drawn to a quack advertisement in the form of a handbill, which is presumably being circulated broadcast, and which contains what purports to be a quotation from a book written by me some thirteen years ago. The sentence which is given as a quotation is one which is not of my construction, but consists of portions of three disconnected sentences pieced together to serve the purpose of the advertiser. If some notorious person of whom I disapprove were to forcibly link his arm in mine and insist on walking in public with me I presume I should have some redress for what would technically be an assault. Is there no redress for the unwarrantable use, which is often made by quacks of the writings of others, by which it is sought to make it appear that support and approval are accorded when it may be, as in this instance, that the very reverse is the case? As many members of the profession have, at one time or another, been annoyed in a similar way, you may perhaps not think it amiss to permit a little discussion of so important a subject in the pages of THE LANCET.

I am, Sirs, your obedient servant,

Wimpole-street, W., Feb. 28th, 1890. G. V. POORE.

TEMPERATURE AND PULSE IN INFLUENZA.

To the Editors of THE LANCET.

SIRS,—I can completely endorse Mr. Farbstein's experience regarding the pulse in uncomplicated influenza as described in his letter last week. But the persistence of a slow pulse-rate after the pyrexia has entirely subsided has been, in the cases I have seen, still more noteworthy. In many mild cases and in all the severe ones the pulse-rate has remained abnormally slow during the greater part of convalescence, in spite of a stimulating diet and tonic medicines.

I take this opportunity of recording the following data of attacks of influenza in the same house. On Jan. 7th last the elder daughter was suddenly prostrated with a typical attack, from which she recovered without relapse. On the 14th (seven days later) her father was struck down, and, after a serious relapse, is only now convalescent. On the 21st (seven days later) the son was attacked, but after a slight illness resumed work. On the 16th their cat was taken with violent running from the eyes and general depression and apparent illness, which in the course of a few days subsided. The cat had never suffered from anything of the kind before. These facts are interesting inasmuch as both the daughter and son excluded the cat from their rooms entirely, but their father permitted the cat to lie on his bed during the greater part of the day.

I am, Sirs, yours faithfully,

Croydon, March 3rd, 1890. JOHN J. REDFERN, M.A., M.D.

NEURITIS IN DIABETES.

To the Editors of THE LANCET.

SIRS,—In an article on "Neuritis of the Circumflex Nerve in Diabetes" in your last impression, Dr. Althaus remarks that in my work on "Paralysis from Peripheral Neuritis" I am silent on the subject of the occurrence of neuritis in diabetes. He quotes the date of my book as 1888, which is an error. It was published in the early part of 1886, when little or nothing was known on this point, and I had had no personal experience in the matter. Immediately after its publication an example fell in my way in hospital practice, and was exhibited by me to the Harveian Society in the ensuing session, a short note of the case being published in THE LANCET. It was of paraplegic form. In August, 1886, I referred to the occurrence of peripheral neuritis in diabetes in a paper read by request in the Section of Pathology at the annual meeting of the British Medical Association in Brighton, introductory to a discussion on peripheral neuritis.[1] Other instances have since come under my observation.

I am, Sirs, yours obediently,

March 5th, 1890. THOMAS BUZZARD.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Port Sanitary Work.

DR. J. STOPFORD TAYLOR, the medical officer of health and port sanitary officer, has recently published his annual report of the work done in the latter capacity. From this it appears that there was very little sickness on board vessels entering the port, and that this was easily dealt with by the sanitary staff. The number of emigrants was very large, and necessitated constant vigilance on the part of the inspectors over the emigrant lodging-houses. Much credit was due to the keepers for the way in which they conducted their houses. Among the emigrants there was not more than the usual amount of sickness, and, considering the large number of young children accompanying them, the eruptive diseases were less than might have been expected. Out of 39 patients removed to hospital 28 were suffering from measles and 2 from small-pox. The number of vessels inspected during the year was 4016, of which 2844 were British, 55 American, 125 German, 450 Swedish and Norwegian, 300 Spanish, 5 Austrian, 84 Danish, 22 Dutch, 50 French, 30 Italian, 15 Belgian, 14 Russian, 9 Greek, 8 Portuguese, and 5 Brazilian. Of the total, 3752 were found in good or fair condition, and 264 defective. The condition of British vessels entering the port was most creditable to officers and men for their cleanly and tidy appearance, which remark applied from the largest mail steamer to the smallest coasting vessel. The American ships maintained their reputation for cleanliness, and the ships of the other nationalities had been on the whole satisfactory. Special reference was made to the screw steamer *Thessaly*, which arrived here on Feb. 15th with a large quantity of dead meat on board. Every facility was given by the owners to the medical officer and his inspectors. The latter found that 257 pieces of beef and 4 pieces of mutton, weighing in all 41,120lb., were in such a condition as to require their destruction, and thus was prevented this large amount of putrid meat being distributed over the city.

The Sailors' Home.

At the annual meeting of the Sailors' Home, held last month, Dr. Bernard, the medical officer, presented the following report:—"The diseases treated during the year were of the ordinary type, and call for no special comment. The health of the boarders has been very good. Some few cases resulting from intemperance have been attended to, but they fall considerably short of the number occurring in former years. It was necessary to send several cases, chiefly affections of the pulmonary organs, to the various hospitals; and the readiness with which they were admitted, whenever room was sufficient, has been a great convenience and a comfort to the invalids, for which our thanks are especially due to the Northern and Southern Hospitals, the Royal Infirmary, and also to the workhouse authorities. The latter endeavour in every way to meet the requirements of our boarders."

The Liverpool Abattoir.

The medical memorial addressed to the city in favour of the removal of the abattoir from its present site has already received upwards of three hundred signatures, and it is fully expected that more will be received. It will be remembered that the Finance Committee refused for the second time to renew the lease, which has now about twenty years to run. At the last City Council this portion of the committee's recommendations was referred back to them for further consideration by a majority of four in a

[1] Brit. Med. Jour., Jan. 1st, 1887.

total of two-thirds of the whole Council. It is said that the Abattoir Company are submitting a new scheme to the Finance Committee, which must first receive the sanction of the medical officer of health. There can be no possible injustice done to the Abattoir Company by refusing the renewal of the lease, as they have still twenty years in which to look out for another site. It is impossible that the Council, with such an almost unanimous expression of opinion from the local medical practitioners, including, with scarcely an exception, the leading physicians and surgeons, will sanction a condition of matters which has also been frequently and emphatically condemned by three successive medical officers of health.

Milk Adulteration.

Mr. Raffles, the local stipendiary magistrate, had recently before him a milk dealer, who was charged with selling milk adulterated with water to the committee of the Royal Infirmary, for the use of the patients in that institution. He pleaded in defence that all milk dealers watered their milk; that he had done it "to throw the cream up"; and that he would lose his contract. The first statement has been indignantly denied by the trade, collectively and individually.

Remarkable Fatal Case of Erysipelas.

An adjourned inquest was held by the city coroner, on Feb. 27th, upon the body of a young woman who had died in gaol while awaiting her trial for some offence. She was admitted into gaol on Jan. 28th, and there was, underneath her chin on the right side, a suppurating wound an inch in length, stated to have been caused by a kick received from some man, which, however, was only hearsay evidence. The wound healed very quickly, and no symptoms of erysipelas appeared until Feb. 12th, when she was admitted into the hospital and received every care, in spite of which she died on Feb. 18th, six days after admission into hospital, twenty-one days after entering gaol, and, presumably, twenty-three or twenty-four days after the receipt of the injury. A post-mortem examination of the body was made by Mr. Lowndes, surgeon to the police, in presence of Mr. Hammond, assistant surgeon, H.M. Prison, Walton. There were no indications of any natural disease, and, with the exception of some old pleuritic adhesions on one side, the thoracic, abdominal, and pelvic viscera and the brain were all perfectly normal. The liver was somewhat enlarged and congested, and it appeared that the deceased had led an intemperate and vicious life. An open verdict was returned.

Extraordinary Case of Mistaken Identity.

On Dec. 27th, 1889, Mr. Churton, the Cheshire coroner, held an inquest upon the body of a woman which had been found on the shore at Egremont, having been left there by the receding tide. After being removed to the mortuary, it was identified as that of Catherine Reed by her son. That woman had been seen on the afternoon of Christmas Day at a public-house close to the Egremont stage. As she did not return home, and as nothing was heard of her, there were these additional grounds for presuming that the corpse was hers. The son drew the insurance money, paid the burial expenses, and donned mourning. On Saturday last the neighbours were startled to see Catherine Reed walking along the street up to her door in apparently good health and spirits. It appeared that she made her way to Liverpool on Christmas night, and, being taken suddenly ill, was removed to the workhouse, where she remained an inmate until last Saturday. Learning that an inquest had been held on her, she wrote to her son; but he, being satisfied of her death and burial, regarded it as a hoax. Now comes the question, Who was the deceased woman? It is very remarkable that no inquiries have been made of the local police as to any other missing woman. The case conveys a warning as to the care which should be exercised in identifying bodies, especially those of the drowned, many very lamentable mistakes having been made.

Hospital Sunday.

The Hospital Sunday collections amount to £6887. Hospital Saturday will not be held until May. A very considerable increase is expected, and it is hoped that the total sum will exceed £10,000.

Liverpool, March 5th.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

Government Inquiries: Condemned Areas &c.

TWO important inquiries by the Local Government Board, into matters vitally affecting the health and well-being of the city, are at present occupying some amount of public attention. In the first, concluded some ten days ago, a scheme was submitted for the improvement off the face of the earth of one of the worst of the insanitary areas of Ancoats. The district had been officially condemned by our medical officer of health, and the corporation now seek for power to act on this representation. The Board's sanction will very probably be given. The scheme is estimated to cost something over £100,000, but nearly one-half of this will be recouped by sale of land &c. Provision will have to be made for the housing of nearly 2000 persons, and it is expected that the corporation will itself set an example as to the kind of buildings to be erected by constructing a model block of dwellings on part of the condemned area. The second inquiry is still going on, and in this the corporation seek powers to extend the boundaries of the city in various directions—that is, to take in adjoining districts and suburbs which are, to all intents and purposes, part and parcel of Manchester. If this scheme be carried out in its entirety, the population of the city will be increased from 378,164 to 520,710, and its area from 5927 acres to 14,342 acres. One district out of the nine affected—i.e., Moss-side—is opposing the application, though why it should do so is hard to say. It depends upon Manchester for its water, gas, libraries, schools, hospital accommodation, &c., and is in difficulty how properly to provide for the disposal of its sewage.

The Hospitals.

At the last meeting of the Infirmary Board the agreeable intimation was made that £3000 had been received under the will of the late Mr. Samuel Feilden; also that £100 had been received from another source. It was stated that the institution had of late received much fewer donations and legacies than formerly, and an appeal was made for increased liberality in this direction. At the annual meetings of the Clinical, the Consumption, and the Dental Hospitals strong appeals were made for increased help towards the work of these various charities; increased demand upon the funds but no increased funds to meet these demands is the report in each case. With regard to the Dental Hospital, it is stated that the increase in the number of patients, which now reaches 12,000 a year, and the increasing demands of the dental school, render it imperative that the provision of a new and more complete building should not long be delayed, and £10,000 is asked for with which to erect a new hospital in place of the temporary building now in use.

Sanitary Awakening.

At the annual meeting of the Sanitary Association a good record of the past year's work was given. The Association takes some credit to itself for having aroused popular feeling as to the wretched condition of many of the homes of the poor, and thus strengthened the position of the corporation in its endeavours now to deal with this subject. It has also carried the agitation into the neighbouring borough of Salford, where things are no better than in our own boundaries. Lately, from the pulpit, the Bishop of Salford denounced the condition of many parts of the borough, and advised his hearers to join the Workmen's Sanitary Association now in existence, with a view of bringing pressure to bear upon the authorities, whose duty it was to apply some efficient remedy to the present disgraceful state of large blocks of buildings.

Provident Dispensaries.

Manchester was among the first of the large towns to take up the provident dispensary question; whether it has been the success its advocates say may be open to argument, especially if the status of its members be taken into account. The annual meeting was held on Friday last, and the report then given showed that there are at present 20,000 members on the books; that during the past year eight out of the nine branches were self-supporting, and that there was a balance on the year's working of £318 for distribution amongst the members of the staff. Undoubtedly one of the

most useful things it has accomplished is the reduction of the number of persons seeking aid from our various medical charities who are not fit objects of charity. Its officers inquire into the status of all applicants for relief at the different hospitals. When it first began this work it was found that no less than 42 per cent. were able to pay the fees required by the dispensary, but during the last two years this has fallen to about 6·5 per cent.

Hospital Sunday and Saturday.

The amounts received up to date from these collections is £7396, but as the whole of the receipts have not yet come in, it is hoped that a considerable sum may be added to this amount. Last year the total exceeded £8000. The weather this year, especially on the Saturday, was very adverse.

Anti-vivisection Society.

At the recent annual meeting of the Manchester Anti-vivisection Society, the proceedings at which cannot be described as enthusiastic or the attendance large, a short report was presented which does not appear to indicate any great amount of vitality in this district with regard to the subject of anti-vivisection. The secretary from the London society admitted that in Manchester "the funds were restricted and the friends of the cause few." The Dean of Manchester seconded the adoption of the report, though his remarks would scarcely satisfy an out and out anti-vivisectionist.

Cremation.

The advocates of cremation do not receive much assistance from the powers that be. The local society made application for the use of a piece of land in one of our cemeteries upon which to erect a crematorium. The cemetery committee have decided they have no legal power to apply ground to such a purpose.

Influenza.

Influenza in Manchester and district, though late in appearing, is now prevailing to a considerable extent, not so much in the city itself as in the surrounding towns and outlying districts. In some cases so many hands are absent from the mills that the latter are with difficulty kept going. At the hospital &c. in Manchester there has not yet been any exceptional demand for treatment of the disease.

March 4th.

NORTHERN COUNTIES NOTES.

(FROM OUR OWN CORRESPONDENT.)

Newcastle: Munificent Bequests to Local and other Charities by the late Mr. John Fleming.

THE late Mr. John Fleming, whose death I noted last week, and mentioned his munificent gift of erecting a new Children's Hospital in this city at a cost of £23,000, has, by his will, further benefited many of our local charities, the total amount exceeding, I believe, £100,000, giving the following large sums, amongst others: To the Fleming Children's Hospital (memorial of his wife), Newcastle, £25,000; Newcastle Infirmary, £10,000; Newcastle Dispensary, £1500; Whitley Convalescent Home, £2500; Hospital for Miners, Brotton, Cleveland, £300; Newcastle Eye Infirmary, £500; Newcastle Lying-in Hospital, £500; Dispensary, Gateshead, £100; Cotham Convalescent Home, £200; Middlesbrough Infirmary, £200; Charing-cross Hospital, £200. Besides these, nearly every charitable organisation in Newcastle of various denominations has received a bequest, and also the Lifeboat Institutions extending along the coast from Saltburn to Tynemouth.

Underground Dwellings in Newcastle.

The Very Rev. Canon Franklin of Newcastle has paid much attention to the housing of our working classes, and he points out that in one street alone we have 100 underground dwellings. His statements have been questioned; but his facts so far have not been controverted. He states, again, that in certain streets which he names near the centre of the city we have about three miles and a half of these underground dwellings. Nor are cellars cheap, for he says the rent paid will average £7 16s. per annum for places into which the sun never shines. Canon Franklin very properly does not advocate the disturbance of the present unfortunate holders, but calls for better housing for the poor and laborious, who have a hard struggle to preserve health and decency. Under such adverse conditions he thinks that, if a company were formed, land could be got from our corporation, which is one of the wealthiest in England. I hope Canon Franklin's voice in this important matter may be heard and his suggestions attended to; but at present the corporation is not engaged in the "housing of the poor" question, but in the "housing" of themselves, for they are now absorbed in the consideration of various schemes—all involving immense sums of money—as to the best site for, and the best mode to erect, a new City Hall, the present having been built about thirty-six years ago.

The Health of Hexham.

At the last meeting of the Hexham Local Board, Dr. Jackson, the medical officer of health, in reference to the health of the town, stated that the death-rate for the past year was but 17·4 per 1000, which is the lowest death-rate ever recorded in Hexham. He, however, comments on the infantile death-rate—viz., 158·0 per 1000 registered births; this, he says, is much too high, and was due to a very excessive death-rate in certain quarters of the town. Dr. Jackson pointed out that Hexham as a health resort should be almost without an equal in the north of England, considering its natural capabilities, but that much sanitary work remained to be done before it could be raised to that position.

North Shields.

At a late meeting of the Tynemouth Board of Guardians, Mr. Knollys, Local Government Board inspector, referred to the subject of hair-teasing in workhouses by old male inmates, and said that it seemed to him, as it did to the Local Government Board, that hair-teasing was a most undesirable employment, especially for elderly persons, and he hoped that the guardians on consideration would see their way to discontinue it. He pointed out that, after ascertaining the opinions of the medical officers, it was given up at Middlesbrough and Newcastle. Very great precautions were taken to prevent the introduction of infectious diseases into workhouses; and as the old hair was brought from all sorts of places, the danger from this source of disease was imminent. The inmates, he said, on being questioned, greatly disliked the employment, and much preferred oakum; the dust and short hairs which they inhaled while teasing affected their breathing, especially at nights. Ultimately the matter, after some discussion, was referred to a committee "for further consideration." It is to be hoped, however, that the committee will not take a very long time to abolish a practice which has been so fully shown to be inimical to the health of the unfortunate old people who are under their guardianship.

Death of Mr. T. Young, M.R.C.S., L.S.A.

I regret to notice the death of Mr. T. Young, surgeon, of South Shields, which took place on the 25th ult. [A notice of the career of this gentleman appears in another column.—ED. L.]

Newcastle-on-Tyne, March 6th.

EDINBURGH.

(FROM OUR OWN CORRESPONDENT.)

Edinburgh Water-supply.

THE question of an additional water supply for the Edinburgh city and district, which has so long occupied the minds of our civic authorities, is to be considered in a more or less definite and practical manner, and a draft report by the convener of the Water Committee of the Water Trust assisted by the treasurer and engineers has been prepared for submission to the Waterworks Committee. The engineers point out that a considerable time, probably seven or eight years, must elapse before any new supply can be made available, and that, in consequence, it will be necessary, or at any rate prudent, for the water trustees to delay as little as possible in making arrangements to obtain a new supply. The present quantity supplied is about 15,300,000 gallons per diem, equal to about forty gallons per head for a population of 385,000. In eight years, assuming an increase of two per cent. per annum, the population would be 450,000, and the present supply of 16,000,000 gallons would therefore allow only thirty-five gallons per diem for all purposes, and in dry years, when the supply can be reckoned at not more than 14,000,000 gallons, the

deficiency would be still greater. In the report the committee give an account of the water taken from the Talla, Manor, Tweed, and St. Mary's Loch. The committee express themselves satisfied with the water from all the sources, but they are evidently of opinion that, taking everything into consideration, the St. Mary's Loch scheme is the most feasible. It is well that matters have at length been properly placed before the water trustees and the public, and it now only remains for those concerned to see that the works necessary for the additional water-supply to the city shall be commenced as early, and carried through as thoroughly, but as economically as possible.

Royal Society of Edinburgh.

The second special meeting, held during the present session of the Royal Society of Edinburgh, took place on Friday afternoon, Professor Sir Douglas Maclagan in the chair. The whole meeting was occupied with the reading and discussion of papers presented by Professor Rutherford and Dr. Berry Haycraft. Professor Rutherford gave somewhat more fully his views on the structure and contraction of striped muscular fibre of crab and lobster, already noted in these columns. Dr. Haycraft read a communication on the Histology, Functions, and Development of the Carapace of the Chelonia, pointing out that that of the tortoise was sensitive to the slightest impact, even that of a drop of water; and he found on investigation that delicate cutaneous nerves could be traced to the nuclei of the epithelial cells of the scutes. He also made reference to the method of the production of the pigment found in the carapace. He stated, too, that the development of the bone of the costal and neural plates was distinctly membranous, starting from cartilaginous ribs and vertebræ. Dr. Haycraft's second communication gave the results of a continued series of observations consecutive to those already given to the Society. He could not agree with those observers who, from the time of Helmholtz, considered that muscles were unable to respond to individual rapid induction shocks. This apparent inability to respond had been due to imperfections in the instruments used for registering the muscular contraction, and he showed tracings of muscular contractions, in which the cord had been stimulated thirty times a second, where the muscles had responded to each stimulation. Even more rapid stimuli had been responded to, and the muscles gave out musical notes which could be heard with the aid of the stethoscope.

Health of Edinburgh.

The weekly report presented by the medical officer of health states that the mortality last week was 134, giving a death-rate of 26 per 1000. A very large proportion of these deaths (48) were due to diseases of the chest. Zymotic diseases accounted for 21, including 1 due to typhoid, 6 to measles, 12 to whooping-cough, and 2 to erysipelas. The intimations for the week comprised—typhoid 9, diphtheria 8, scarlatina 13, and measles 218. In connexion with these reports a correspondent has directed attention to an extremely ludicrous mistake which has crept into the *Scotsman*, a mistake which illustrates most forcibly Pope's well-known saying. It was reported by the convener of the Public Health Committee that 1582 cases of infectious diseases had occurred during the month of January, 1890, 1379 of which were cases of measles and 141 of scarlet fever. On the head of this the *Scotsman*, after giving the death-rate correctly as 27·88 per 1000, states: "The main infectious diseases have been measles, which caused the death of 1379 people in January, and scarlet fever, which killed 141. This is a terrible tale, and one that ought to be taken to heart by the people of Edinburgh." If true, it would certainly be a terrible tale; but as little more than one-third of this total number died during the month from all causes, the point of the moral is somewhat blunted. The writer of the article in question meant well, but he was somewhat "mixed" as to his facts.

Scottish University Commission.

It has already been noted that many mountains were in labour. To those may now be added the Royal Colleges of Physicians and Surgeons of Edinburgh and the Association of Lecturers in the Edinburgh Extra-mural Medical School. It is fully expected that each of these bodies will very shortly submit elaborate reports, in which they will suggest most drastic reforms in the present university system. Very naturally, most of those suggested reforms are in the Faculty of Medicine. It is understood that the general line they all take is that extra-mural teaching should play a much more important part than it at present does in the academic system. There are of course differences of opinion as to how this is to be done; but it is evident that very strong pressure will be brought to bear on the Commissioners to ensure the adoption of at least a number of the suggested amendments.

Munificent Legacies to Edinburgh and other Charities.

Mr. James Taylor of Starley Hall has left to charitable institutions in Edinburgh no less a sum than £53,500, of which the Edinburgh Society for the Relief of Destitute Sick receives £3000; the Edinburgh Hospital for Sick Children, £2000; the Longmore Hospital for the Relief of Incurables, £3000; Institute for the Relief at their own Homes of Persons suffering from Incurable Diseases, £2000; the Royal Edinburgh Infirmary, £2000; Larbert Institution for Imbeciles, £1000; Edinburgh Blind Asylum, £2000. Other very large legacies are left to various charitable institutions. Some men deserve to have money, as they know what to do with it. Mr. Taylor was certainly one of these.

Honorary Graduates of the University of Edinburgh.

The Senatus Academicus of the University of Edinburgh have unanimously resolved to offer the honorary degree of Doctor of Law to the Right Hon. Henry Chaplin, M.P., and Mr. Joseph H. Gilbert, Ph.D., Professor of Rural Economy; to Sir John Fowler, C.E., and Mr. Benjamin Baker, C.E., the distinguished engineers of the Forth Bridge; to Sir Dyce Duckworth, M.D., Treasurer of the Royal College of Physicians, London; Sir John Kirk, M.D., G.C.M.G.; Mr. James Hardy, Berwickshire; General R. Maclagan, R.E.; Mr. John Marshall, M.A., Rector of the High School, Edinburgh; the Right Hon. J. P. Bannerman Robertson, M.P., Lord Advocate of Scotland; Mr. Frederick Seebohm; Emeritus Professor C. Piazzi Smyth; and Mr. Spencer Walpole, M.A.

Lord Rectorship of Edinburgh University

The two candidates brought forward by the University Political Associations for the office of Lord Rector are Sir Charles Russell, Q.C., M.P., for whose return the Liberal students are anxious, and the Right Hon. G. J. Goschen, M.P., Chancellor of the Exchequer, the unanimously adopted candidate of the University Conservative Association. From now until November political feeling will probably run high; but it is not likely that it will in any way interfere with personal friendships, as politics with students are entirely of an abstract nature.

Edinburgh, March 4th.

DUBLIN.

(FROM OUR OWN CORRESPONDENT.)

The Dublin Sewerage.

A MEMBER of the Corporation has given notice that he will call attention to the fact that the bad sanitary condition of the Royal Barracks is owing to the neglect of the Corporation in not having placed a main sewer along Arbour-hill at the top of the barracks, nor one in Barrack-street from the horse to the foot barrack gates, so that the drainage of the populous district of Stoneybatter has been lodged under the foundation of the buildings in the said barracks. He will also call attention to the defective condition of all the main sewers of Dublin, which he believes to be the real cause of the high death-rate that has existed for so many years, and will move the following resolution:—"That, inasmuch as the high death-rate and bad sanitary condition of the city of Dublin is owing to the absence of a proper system of main drainage, or to sewers, or to house drainage, that the Local Government Board be requested to appoint a fully qualified engineer to at once investigate and report on their present condition, and if found to be imperfectly constructed and defective, or not in existence in places where they would be specially required, no action be taken by the Council for the promotion of any Improvement Bill until a full investigation and decision be had on this most important sanitary subject."

Retirement of Dr. Nugent, Inspector of Lunatic Asylums.

At a recent meeting of the governors of the Richmond Lunatic Asylum, the following resolution was unanimously

adopted: "That the governors of the Richmond District Asylum record their high appreciation of the public services of Dr. Nugent as head of the lunacy department in Ireland for a period extending over forty-three years. They sincerely regret his meditated retirement, as by his judgment and experience he has amply and beneficially fulfilled the unceasing and onerous duties of his office. In his immediate connexion with the Metropolitan Asylum, the governors feel deeply indebted to Dr. Nugent, not only for his assiduous and personal attention to the efficient working of the institution and the well-being of its inmates, but for the courtesy exhibited by him at all times in his intercourse with the board, and his desire to carry out its wishes." It is stated that Dr. Nugent, in recognition of his long and valuable services as inspector of lunatic asylums in Ireland, will receive the honour of knighthood. It is probable that his Excellency the Lord-Lieutenant will confer the distinction next week.

Dublin Hospitals Bill.

The distribution of grants to certain of the Dublin hospitals will again come under discussion in Parliament, as the Government have promised to reintroduce the Bill which was withdrawn last year. If in the Bill it is still proposed to lessen the Parliamentary grant by £4500 a year, vigorous opposition will be raised, as the hospital accommodation would thereby be reduced by nearly one hundred beds. Independently of this, there are serious objections to the proposed measure, which have been pointed out on more than one occasion in these columns; and if the Bill is left to the end of the session, it probably may be quietly shelved, without causing much surprise to those interested in the matter.

Health of Dublin in 1889.

During the past year the births in the Dublin Registration District numbered 9866, or 28 per 1000, and the deaths 9053, or 25·6. The mortality from zymotic diseases shows a large decrease as compared with the previous year, and is also below the average for the ten years 1879–88—viz., 446 below the average for the preceding ten years, and 173 under the number for 1888. Measles caused 112 deaths, against 134; scarlatina 33, against 170; continued fever 258, against 292. Of these 18 were due to typhus, and it may be noted that since 1883 there has been an uninterrupted decline in the mortality from this form of fever, the number of deaths for last year being the lowest on record. Enteric fever caused 228 deaths, or an increase of 60, the disease having been prevalent during the fourth quarter.

Viceregal Appointments.

His Excellency the Earl of Zetland has made the following appointments in his household:—Philip Crampton Smyly, M.D., F.R.C.S.I., to be Physician in Ordinary, in the room of G. W. Hatchell, deceased; and Kendal Franks, M.D., F.R.C.S.I., to be Surgeon in Ordinary, vice P. C. Smyly, appointed Physician in Ordinary.

Inspector of Lunatic Asylums.

The *Dublin Gazette* announces that his Excellency the Lord Lieutenant has appointed Dr. Edward Courtenay to be an inspector of lunatic asylums in Ireland, in the vacancy created by the retirement of Dr. John Nugent.

The Town Commissioners of Kingstown have voted an annual payment of £100 to the two local hospitals: £70 to St. Michael's, and £30 to the Rathdown Hospital.

Dublin, March 4th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

The Bath Treatment of Typhoid.

THE system of cold baths in the treatment of typhoid fever as employed in Germany has been put to the test by Dr. Josias, and he reported to the Société Médicale des Hôpitaux that during the years 1888 and 1889 he treated thirty-six cases of typhoid fever by cold baths—that is to say, with water at 18° C., repeating these every three hours. Of thirty-six cases the experimenter obtained thirty-five recoveries. Drs. Renoy and Richard, who, on their side, had followed this method, obtained 103 recoveries out of 108 cases. Dr. Merklen, on the other hand, in a report on the mortality caused by typhoid fever in the hospitals of Paris, showed that this mortality fluctuated between 14 and 15 per cent. In another report by Dr. Sorel, the author stated that out of 105 cases of typhoid fever he obtained 100 recoveries, and five cases proved fatal. The treatment consisted in prescribing the sulphate of quinine associated with the salicylate of soda. Some of the patients had taken baths, but rather warm than cold. Dr. Sorel does not believe that in present circumstances the superiority of cold baths is sufficiently well established to make it a method of treatment obligatory in the French army, as it is in the German army. A French critic, writing on the cold-water system of the treatment of typhoid fever in Germany, gives the following statistics, drawn up by Dr. Longuet, relative to the German army, which may be found interesting here. In 1865, out of 2500 typhoid patients, there were from 500 to 700 deaths. From 1882 to 1884 the number of patients was nearly identical; but, thanks to the application of the cold baths, the deaths among the soldiers amounted on the one hand to 221, and to 183 on the other. Since then the diminution of the mortality was slow, constant, and mathematical, according as the cold-water system extended. From 24 per cent. in 1865, the mortality fell to 11 per cent. in 1876. In 1883 it was not more than 9 per cent. These figures were thought by the writer to be conclusive on the subject, and he asked why the French were obstinate and remained behind in this matter.

Tuberculosis in the Army.

The Minister of War has issued a circular to commanding officers of regiments, containing instructions for arresting the propagation of tuberculosis, the tenour of which is to the effect that all soldiers presenting symptoms of tuberculosis should be immediately removed from the army, and that the medical officers should examine all the young soldiers who appear to be delicate, with a view of discovering any tubercular tendency. They should not, however, base their conclusions exclusively on the size of the chest, for daily experience proved that there was no absolute relation between the development of the thoracic cavity and the integrity of the respiratory organs, but they should be based on the signs revealed by auscultation, percussion, and the constitutional *ensemble* of the individual. Every man presenting evident signs of "specific bronchitis" would be proposed for immediate removal; whereas, in the case of "suspected persons," removal would be postponed for three months. The circular adds that this method, partially applied, has given the following results. In 1867 phthisis caused 2·23 deaths per 1000; in 1877 it caused only 1·45 deaths per 1000; and in 1887 the proportion fell to 0·99. This last figure is nearly the same as that which was found in the Prussian army (0·83 per 1000), whereas the mortality is 2·14 per 1000 in England, 1·7 in Austria, and 1·1 in Belgium.

Paris, March 4th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Suicide in Berlin.

THE cases of suicide and attempted suicide that came to the knowledge of the Berlin police last month numbered seventy-five—i.e., twelve more than the highest number hitherto reported in one month, and thirty-three more than the monthly average of 1889. Rather a gloomy omen for 1890. It seems not unnatural to conjecture some connexion between this epidemic of suicide and the depressing power of influenza.

A Case of Poisoning by Antifebrin.

Professor Brieger of Berlin reports a case of poisoning by antifebrin. A dose of only 0·05 gramme had been taken for headache three times in one hour. The condition of the patient was very alarming, and ether, coffee, and friction had to be used. The symptoms were cyanosis, palpitation, diplopia, and alarm. The headache, which had passed off for the nonce, soon returned.

Leprosy in the Sandwich Islands.

The centre of interest at the meeting of the Berlin Medical Society on the 29th ult. was a lecture delivered by Professor Rudolf Virchow, and elucidated by stucco-casts illustrative of leprosy in the Sandwich Islands. The Academy of Sciences resolved some years ago to subject the leprosy in that group of islands to special study. The choice of those islands as the field of research was due to the circum-

stance that leprosy was supposed to have been carried to them. On reaching Hawaii, however, Dr. Arning, to whom the work had been entrusted, convinced himself that leprosy had long been endemic there, and had gained ground in the last ten years.

The Etiology of Boils.

Dr. Schimmelbusch, of Cologne, believes that the well-known staphylococcus aureus is the germ of boils. He has examined the pus of a large number of boils in various parts of the body both under the microscope and by cultivation on agar-agar and on gelatine, and always found it to contain the staphylococcus aureus, albus, and citreus, but especially the first-named. In order to ascertain how the micro-organisms penetrate from the surface to the deeper parts of the skin, he rubbed a pure culture of the staphylococcus aureus into the skin of the thighs of two young people who were dying of blood-poisoning. In both cases pustules formed on the reddened skin, and the matter taken from them contained a large quantity of the staphylococcus aureus. In one of the patients a typical boil formed during the following days; the other died. The pieces of skin into which the culture had been rubbed were cut out, and the microscope showed that the skin was intact, and that the cocci had penetrated along the hair-shafts into the hair-follicles, and thence into the adjacent tissue. Dr. Schimmelbusch found the same conditions in the case of boils which had formed spontaneously in healthy people.

Disinfection in Berlin.

The records of the first disinfection establishment in Berlin show that the amount of work done by it in the year ending on March 31st, 1889, was 50 per cent. greater than that done in the year ending on the same day of 1888. One of the reasons of this great hygienic success is the cheapness of the rates; another is the circumstance that the establishment makes it extremely easy for one to take advantage of its services; all one has to do is to write a post-card to the office.

The International Medical Congress.

The invitations and preliminary departmental programmes for the International Medical Congress to be held here next August are now ready, and are to be sent this month. The organisation committee of the department for general pathology and pathological anatomy, of which Professor Virchow, the President of the Congress, is the head, has selected the following themes for discussion: (1) Lesions of the myocardium; (2) the share taken by the white blood-corpuscles in the formation of tissues; and (3) tuberculosis.

New Books and Essays.

"Influenza, its Nature and Treatment," by Dr. Danz; "Influenza, its Nature and Treatment, and Preventive Measures to be taken against it"; "The Typhus Epidemic of 1889 in Berlin," by Dr. Max von Pettenkofer; "The Question of Malignant Conversion of Benign Tumours of the Larynx, especially after Intra-laryngeal Operations"—the results of an extended collective inquiry among laryngologists, initiated by the International Centralblatt für Laryngologie, which is edited by Dr. Felix Semon, of London; "Diet," by Dr. Boas.

Dr. A. Waller, of St. Mary's Hospital, London, has recently delivered a lecture upon the Electricity of the Heart, before the Berlin Physiological Society.

Berlin, March 4th.

Obituary.

DAVID PAGE, M.D., M.R.C.P. EDIN., F.C.S.

DR. PAGE of the Local Government Board, whose unexpected death in Dublin on Feb. 20th at the early age of forty-four years it was our painful duty to announce last week, was the son of Mr. David Page, F.R.G.S., of Lanarkshire, formerly Professor of Geology at the College of Science in Newcastle, and a co-worker with Robert and William Chambers. Dr. Page was born in July, 1845, and in 1861 attended the classes of natural history and chemistry in the University of Edinburgh, subsequently filling the post of chemist at the gunpowder works of Messrs. Wakefield and Co., near Kendal. In 1867 he returned to the university as a student of medicine. Dr. Littlejohn writes of him that "his curriculum was of the most brilliant" character, and that "he was the best man who in 1870 (a year remarkable for general excellence) presented himself for examination for the M.B. degree. Page and Hincheliffe stood out head and shoulders above the rest; and at the final tussle between these distinguished students at the end of their curriculum, the 'blue ribbon' of the University for the most distinguished University career—viz., the Ettles Scholarship—was awarded to Page. In 1869, while yet an undergraduate, he was elected a president of the Royal Medical Society of Edinburgh; and in 1873, at his graduation M.D., he won the Gold Medal for his thesis on 'The Value of certain Signs observed in Cases of Death by Suffocation, and on Death by Hæmorrhage in the Newborn.'" After taking his M.B. degree, Dr. Page settled down in general practice at Kirkby Lonsdale, in Westmoreland. While there he received on two occasions an injury to his head, first by a fall from his horse, producing concussion, and a few weeks later by being thrown out of his trap against a stone. There is little doubt that one of these injuries laid the foundation for the malady which caused his premature death. In 1873 he was elected the first medical officer of health for the Westmoreland combined sanitary districts. The excellent work which he performed in this post attracted the attention of the authorities at Whitehall, and in 1883 he was offered and accepted a medical inspectorship under the Local Government Board. He now removed to Lancaster as a convenient centre for his work in the northern counties, which were assigned to him for vaccination and other purposes. His new work, and especially the etiological investigations he had to make in various parts of the kingdom, was thoroughly to his taste, and the reports of his investigations (many of which have been published in the annual reports of the medical officer of the board), are models of patient inquiry, and illustrate his unusual acuteness of observation and his remarkable power of clear and close reasoning. In the years 1885 and 1886 Dr. Page formed one of a small band of selected inspectors appointed by the Board to make a sanitary survey of England and Wales, with a view of ascertaining the state of preparedness to resist the introduction and spread of cholera at that time prevalent on the Continent. During these years Dr. Page visited and reported upon no fewer than fifty-five urban, twenty-one rural, and four port sanitary districts in the counties of Northumberland, Cumberland, Westmoreland, Durham, Yorkshire, Lancashire, and Cheshire, holding conferences with the local authorities and medical officers of health, encouraging the diligent, and advising and urging amendment where he found administrative laxity. Dr. Page threw all his energy into this work; he spared himself in nothing. The director of the survey speaks of his labours at this time as scarcely credible, and of the reports he made to the Board as almost equalling in accuracy of detail those that he had made more leisurely under ordinary circumstances. Indeed, he worked at this survey much too hard. It was not long after this excessive work that obscure symptoms pointing to some cerebral affection first became manifested; but still he persisted in working, until at the end of 1887 he sustained again some sort of concussion by a fall from a ladder while decorating his hall for Christmas. Whether this fall was a slip or the result of giddiness was not apparent. But at last his health gave way to such an extent that he was persuaded to consult Dr. Hughlings Jackson and Dr. Ferrier, at whose advice he took three months' rest, and visited the Canary Islands; but, at the expiration of his leave, he resumed his official work with his customary ardour. About six weeks before his death he was suddenly seized with a serious giddiness at a railway station, and had to be assisted into a carriage. As soon as he was sufficiently recovered he came to London to consult with his chief, Dr. Buchanan, and, by his advice, again saw Dr. Hughlings Jackson and Dr. Ferrier, who now (and correctly) diagnosed a cerebral tumour. Dr. Buchanan at once insisted upon Dr. Page's taking a rest of six months. With a view to accompanying his friend, Professor Hartley, in a trip to the Mediterranean, he crossed over from Morecambe to Dublin, where he arrived early on the morning of Tuesday, the 18th ult. In the course of the day he took a drive with Professor Hartley in the Phœnix Park, and afterwards dined with a medical neighbour, Dr. Frazer. He appeared to be in excellent spirits and quite well, but on returning home he found difficulty in walking, and had to be helped by Professor Hartley. The next day he com-

plained of headache, which became more severe as the day advanced. In the evening he became so much worse that Dr. Frazer and Dr. W. Smith were called in, but nothing relieved him, and notwithstanding all the loving care of Professor and Mrs. Hartley, he gradually became unconscious, and breathed his last at 6.15 A.M. on Thursday, the 20th ult. The post-mortem examination showed on the inside of the skull, a little to the left of the median line of the parietal region, a projecting nodule of bone measuring about an inch by three-quarters of an inch, dipping into the cranial cavity from a quarter of an inch to half an inch. Corresponding to this was a depression in a tumour, which tumour extended for nearly three inches along the longitudinal fissure, with a breadth of about two inches, and penetrated for a depth of an inch or more into the superior parietal lobule.

Dr. Page was a good modern linguist, a fluent speaker, of quick apprehension, and ready wit, a most easy and rapid writer, and enthusiastic in everything he undertook. He was a glutton after knowledge: he even engaged in the study of the law, and, we understand, would have been called to the Bar last Hilary term had not his health broken down. But above all this his moral characteristics stood pre-eminent. The writer of this obituary notice can only speak and think of him with strong affection. He was not only admired, but beloved by all his colleagues on the medical staff. Nor has the gloom cast by the early removal of one so gifted been confined to these. Dr. Page was a man who made friends everywhere. Frank and wonderfully winning in his intercourse with all, of a happy and genial temperament, always ready to place the most favourable construction on the words and acts of others, he possessed the inestimable art of giving full expression to all that was in his mind in the course of his official duties, not only without giving offence, but with the result of making it felt that all he said was the outcome of honest conviction and of friendly interest, even when his duty compelled him to denounce official negligence. This combination of gentleness with firmness not only rendered his services invaluable to the Board, but gained for him such universal trust and esteem as on several occasions to have called forth from the sanitary authorities of large towns and cities public expressions of thanks for the services he had rendered them. The same characteristics, too, made him at all times a *persona grata* to the medical officers of health and others in our profession with whom he was placed in official relation. He invariably gained their confidence at once, never failed to secure their hearty co-operation in his work, and always left them with the true impression that they had acquired a friend.

Dr. Page was twice married. He has left a widow, seven children, and a widowed mother to mourn their loss. He was interred last Monday week in the graveyard of the picturesque old Hutton Church, near Kendal. The President and staff of the Local Government Board were represented at the grave by his colleague, Dr. Barry, and the local medical officers of England by Dr. Tatham of Manchester and Mr. Fox of the Mid-Cheshire Combined District. Many of his professional friends were also present, among whom were his intimate friend, Dr. Shuttleworth, of the Royal Albert Asylum, Lancaster, Mr. Noble of Kendal, and Messrs. Wilson and Cook of Newcastle, in addition to a large number of others who knew and admired him from Kendal and its neighbourhood.

THOMAS YOUNG, M.R.C.S. ENG., L.S.A.,

OF SOUTH SHIELDS.

MR. YOUNG, whose death we recorded last week, at the age of sixty-eight, had long ceased to practise owing to blindness. For the same reason he had been little seen among his fellow townsmen of late years, being almost entirely confined to the house. Before this affliction overtook him, however, and while it was steadily disabling him, he was one of the most laborious members of his profession, and one of the most active citizens of South Shields. He had an excellent professional training as a pupil of the late James Emery, Esq., of South Shields, and, subsequently, a student of the London Hospital. He had a large colliery practice in South Shields and the neighbourhood. He might be seen night and day walking roads which were so familiar to him that even when his sight began to fail he still seemed to know them. Bravely he stuck to his work for years after his infirmity had reached a point which would have thrown ordinary men into hopeless despondency. One of his peculiarities was his great power of sustained physical labour with much interruption of sleep from obstetric work. Few of his contemporaries ever remember his taking a holiday. His only recreation was in being a member of the Town Council, where a certain brusqueness of manner without any real discourtesy in his constitution brought him into occasional conflict with the Mayor for the time being and with the recognised rules and temper of debate. But he bore no malice, and indeed had one of the kindest of hearts, so that he was a general favourite even with those who differed from him. Though his life was one of action, and his manner, as we have said, was somewhat brusque, he had a rare taste for good books and pictures. He leaves behind him a widow and three sons to mourn their loss. And though for years he has neither seen, nor been much seen by, his fellow townsmen, there are few of them that would not feel a difference when they heard that he was gone. By the colliers of Shields and Harton he will be long remembered as a feeling and helpful friend, ready to serve them night and day. It is in such histories as his that the heroism of life is to be studied.

HARRISON BRANTHWAITE, F.R.C.S. ED.

MR. BRANTHWAITE, whose death, at the age of sixty-two, took place at Halesowen on Feb. 12th, became an inhabitant of Willesden some sixteen years ago, when Harlesden was scarcely more than a large straggling village, with a scattered population. He, however, soon worked up a large practice, and became more and more known amongst those who year by year came out to this north-western suburb to add to its growth and to increase its importance. His genial disposition and uniform courtesy won him friends amongst every class with whom he came in contact. He took an active interest in parochial matters, as well as in everything that related to the social welfare of his fellows. Soon after the formation of the local board Mr. Branthwaite was elected to that body, and the manner in which he carried out his duties called forth the almost universal approbation of his constituents. He resigned his seat a few years later on being appointed to the post of medical officer of health for the district, a position he filled with singular skill and ability till a year or so ago, when the stress of other engagements forced him to relinquish his office. Mr. Branthwaite was a temperance advocate; and being a clear and persuasive speaker, he could boast of exceptional results in this particular field. He had attended several continental congresses, where his testimony was especially valued. He left Willesden to establish a home for male inebriates at Twickenham, and his efforts in this direction were so speedily appreciated that he shortly afterwards opened a similar home for females at Halesowen. Some time ago the deceased gentleman was found to be suffering from progressive anæmia, and for the past two or three weeks he had been in a critical condition. The tidings of his death therefore came as no surprise to most of his many friends in and around Birmingham. Mr. Branthwaite leaves a widow (under whose auspices the Colman Hill House Home will still be continued) and a large family, for whom the greatest sympathy is felt. A clause in a codicil to his will, based on social, sanitary, and religious grounds, gives directions for his body to be cremated.

Medical News.

GUY'S HOSPITAL MEDICAL SCHOOL.—The new Residential College at this hospital will be opened by the Right Hon. W. E. Gladstone on Wednesday, March 26th.

FOOTBALL CASUALTY.—On Saturday, whilst playing a return match at Reading between the Reading United and the 49th Regiment, a man named Harding sustained a fracture of his collar-bone.

NEW WORKHOUSE INFIRMARY, COVENTRY.—The formal opening of the new infirmary erected by the Coventry Guardians, at a cost of about £5000, by the chairman of the Board (Mr. T. G. Beamish) took place last week. It supplies a want which has been long felt.

AN UNFORGOTTEN OPERATION.—The treasurer of the Royal Westminster Ophthalmic Hospital has recently acknowledged the gift of £50 from an anonymous donor, signing himself "Grateful," in recognition of a successful operation performed on his father upwards of fifty years ago, by the late Dr. Guthrie.

KENDRAY HOSPITAL, BARNSLEY.—This new hospital was formally opened on the 26th ult. by Mrs. Ann A. Lambert, widow of the late Mr. Edward Lambert of London, and surviving daughter of the late Mr. F. Kendray of Barnsley, by whom it has been erected and furnished, at a cost of about £5000.

BOOTLE BOROUGH HOSPITAL.—During the past year the number of in-patients had increased by 24 per cent. and the out-patients by 45 per cent. The expenditure had exceeded the income by £550, although the receipts were considerably larger than in previous years. The horse ambulance since its presentation had been largely called into requisition.

UNIVERSITY COLLEGE, LONDON.—At the annual general meeting of University College, held at the College on Wednesday, Mr. Erichsen, LL.D., F.R.S., was re-elected president; Sir U. J. Kay-Shuttleworth, M.P., vice-president; and Sir R. N. Fowler, M.P., treasurer; and Dr. C. Graham and Professor C. Heath were added to the Council.

LEICESTER.—During the past three weeks influenza has continued to prevail very extensively in Leicester, the type of the disease being of much greater severity than at its first onset. It has affected all classes and all districts of the town, and relapses have not been unfrequent. Only five deaths have been registered as due directly to it, but the mortality from respiratory diseases in general has greatly exceeded the average during the past few weeks.

ROYAL SURREY COUNTY HOSPITAL.—The report for the past year records a satisfactory extension of the usefulness of the institution and of its financial position. The funded property had increased from £17,228 9*s.* 7*d.* to £18,366 9*s.* 7*d.* The total receipts (including £104 17*s.* 5*d.* overplus from the new wing building fund) were £5538 19*s.* 2*d.*, and the balance of income over expenditure was £145 11*s.* 6*d.* The number of patients was largely in excess of that of 1888, being 5504, against 4920.

DEWSBURY AND DISTRICT GENERAL INFIRMARY. The annual report for 1889 shows that the infirmary had fully maintained its usefulness and efficiency; 2082 patients had attended the dispensary, an increase of 451. The home patients numbered 472, who had received 2399 visits from the house surgeon. The number of in-patients was 280, and 733 cases of serious accidents had been treated in the casualty ward, against 644 the previous year. A debt of £900 on the laundry and mortuary had been paid, and £88 carried to the endowment fund.

THE next quarterly meeting of the Medico-Psychological Association will be held at Owens College, Manchester, on Thursday, March 13th, 1890. Dr. Ross will deliver an address on "The Psychical Disorders of Peripheral Neuritis," and Dr. George M. Robertson will read a paper entitled, "Does Mania include Two Distinct Varieties of Insanity, and should it be Subdivided?" A discussion on "The Best Provision to be made for the Pauper Idiots of Lancashire" will be opened by Dr. Shuttleworth. In the afternoon the County Asylum, Prestwich, will be visited.

ROYAL BERKSHIRE HOSPITAL.—The annual report for 1889, just issued, records the success of the special appeal for funds, made last year, the Jubilee year of the institution, which resulted in an addition of seventy-eight to the number of ordinary subscribers and to donations received, amounting to £2137 19*s.* 7*d.* The total income from all sources was £9742 14*s.* 9*d.* The Board of Management had been enabled to invest in public securities £2205; to liquidate the balance of £581 7*s.* 6*d.*, which was due to the treasurer, to meet the current expenses; and to make other extra disbursements, leaving a small balance in hand. The totals of in- and out-patients treated were respectively 1086 and 1630, and the total of accidents and emergencies was 1707. The report specially calls attention to the benefits derived by patients sent to convalescent homes, and appeals for additional subscriptions to the Convalescent Fund.

NEWARK HOSPITAL.—The report for 1889 shows a considerable increase of in-patients, and one of the most satisfactory features of the year was the addition of workmen's subscriptions. A difficulty had arisen, and which is still pending, as to a piece of land adjoining the hospital, which was intended to be presented to the institution as a garden for the patients. During the year a donor (Lady Ossington) had died, but her ladyship had made good future provision for the hospital.

THE SANITARY INSTITUTE.—The Council have accepted an invitation from the Town Council of Brighton to hold the Autumn Congress and Health Exhibition in that town in September next.—A sessional meeting of the Institute for 1889-90 will be held at the Parkes Museum, on Wednesday, March 12th, at 8 P.M., when a paper will be read on the Sanitary Condition of Japan, by W. Kinninmond Burton, Professor of Sanitary Engineering at the Imperial University, Tokio, Japan. The paper will be followed by a discussion.

EAST LONDON HOSPITAL FOR CHILDREN. — Mr. H. A. Brassey presided at the eleventh annual festival dinner, held on Wednesday at the Holborn Restaurant, in aid of this institution. The Chairman, in proposing the toast of the evening, stated that since the hospital had been opened no fewer than 217,000 patients had been admitted, while last year 20,000 children were treated. The claims of the institution upon public sympathy and generosity were obvious, and he appealed for funds for the hospital itself, and for a long felt want—an out-patients' department.

MIDDLESEX HOSPITAL.—The annual report of the past year states that the number of patients treated during the year was an excess by over 3000, and the largest number ever before recorded. The in-patients were 2948, and the out-patients 38,830, an increase respectively of 129 and 2885 on 1888. The income amounted to £19,776, an addition of £1851; the expenditure had risen to £28,590, showing an outlay over income of £8814 to be charged to capital. Of this sum £3343 was due to extraordinary expenses, and included the cost of rebuilding the post-mortem room and mortuary.

MORLEY HOUSE CONVALESCENT HOME, DOVER.—The Lord Mayor presided at a meeting of working-men delegates, who numbered about 700, held on Saturday at the Mansion House, to promote the objects of the Home for Working Men. The Home started with a debt of £2000, of which £600 remains unpaid. The purpose of the present meeting was to organise a great parade of all the friendly, benefit, and trade societies before the Lord Mayor and sheriffs on May 10th next at the Albert Hall. The Lord Mayor having opened the proceedings, Sir John Colomb, M.P., moved that the meeting pledge itself to render every possible assistance to not only liquidate the present debt, but to provide adequate funds for the extension of the Home. The motion was carried by acclamation.

PRESENTATIONS.—Mr. R. D. R. Sweeting, the newly appointed medical inspector of the Local Government Board, was presented, on leaving the Western Fever Hospital, with a handsome silver coffee-pot, subscribed for by the whole staff as a tribute of their regard. He was also entertained at a farewell dinner at the Café Verrey by his late medical colleagues of the Asylums Board.—On Wednesday last, March 5th, at a meeting of the general committee and medical staff of the Warneford, Leamington, and South Warwickshire General Hospital, a silver salver and tea and coffee service, value fifty guineas, was presented to Bernard Rice, M.D., of the Parade, Leamington, in commemoration of his valuable services to the hospital during his occupancy of the office of house surgeon for the past eight years. He was previously presented by the officers and nurses of the hospital with a handsome oak writing-table.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Consolidation Bill.

IN the House of Lords, on Tuesday, the 4th inst., the Lord Chancellor, in moving the second reading of the Lunacy Consolidation Bill, said this Bill was simply a measure of consolidation, and hoped that every facility would be given for its passing.

London Sewage.

In the House of Commons, on March 1st, Mr. Ritchie, in answer to Major Rasch, stated that as no definite scheme for the disposal of London sewage was before the County Council, he was not in a position

to say what opportunity could be afforded to the inhabitants of South-East Essex of expressing their views and giving evidence.

Medical Stores.

Mr. Brodrick, in reply to a question by Mr. Hanbury, said: "The question of obtaining medical stores for the Army by public competition has been carefully considered, and as the paramount consideration is to obtain medicines of the best quality for the use of troops, the supply has been for some years entrusted to two firms of high standing. The matter cannot be decided solely upon the question of the price of the article, and further information will be afforded when the question comes before the Public Accounts Committee. If that committee is not satisfied with the explanation the matter will be reconsidered."

Medical Officers in the Army and Navy.

On Monday, Dr. Farquharson asked Mr. Stanhope what action he had taken or intended to take with the recommendations contained in the report of the committee appointed to inquire into the pay, status, and conditions of service of the medical officers of the Army and Navy which was laid upon the table of the House in August, 1889.—Mr. E. Stanhope, in reply, said: "The recommendations of the committee would, if carried out, involve an annual increase of expenditure exceeding £100,000, for which no sufficient grounds appear to me to have been brought forward. I do not propose to give effect to the recommendations involving expenditure; and as regards the recommendation to confer combatant titles on medical officers, as I find that my military advisers are unanimously opposed to it, and the naval medical officers do not desire it, no change is proposed in the titles. It is not intended to publish the evidence; but if the hon. member would like to see it, I shall be happy to show it to him or to any other hon. member who may be interested."

In reply to a similar question, Lord George Hamilton, First Lord of the Admiralty, stated that the Admiralty had had under their consideration the recommendations, three in number, relating to the Naval Medical Service, and they were in communication with the Treasury on the subject. The third recommendation, relating to Yarmouth Hospital, involved an important administrative question, which had already occupied the serious attention of the Board of Admiralty. Owing to the peculiar difficulties of the case, no satisfactory solution had yet been found.

Vaccination.

In the House of Commons on Friday, Feb. 28th, Mr. Summers, on behalf of Mr. Channing, asked the President of the Local Government Board whether inquiry had been made into the case of Emily Maud Child, an infant, whose death, in accordance with the medical evidence, had been attributed by the coroner's jury to be due to "syphilis acquired at or from vaccination."—Mr. Ritchie, in his reply, stated that an inquiry had been made by an inspector of the Board with regard to the case, and his conclusions were not the same as those arrived at at the inquest. The inspector states that the child in question was the only sufferer from syphilis among all the children he reached and whom he saw that had been vaccinated with the same or any other lymph in the whole course of the vaccinator's March vaccinations. The report of the inspector would be placed at the disposal of the Royal Commission on Vaccination, now sitting.

Infectious Diseases (Prevention) Bill.

On Wednesday, March 5th, this Bill was read a second time.

Public Health Acts.

The Public Health Acts Amendment Bill and the Urban Sanitary Authorities (Further Powers) Bill were read a second time and referred to a Select Committee.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.

BROCK, ERNEST H., M.B., B.S. Lond., M.R.C.S., has been appointed Resident Medical Officer to the Royal Chest Hospital, City-road, vice W. T. Strugnell, resigned.

EDGEWORTH, FRANCIS H., M.B., B.C., B.A. Cantab., B.Sc. Lond., has been appointed one of the Honorary Physicians to the Bristol Hospital for Sick Children and Women.

FALKNER, EDGAR A., M.B., has been appointed House Surgeon to the Great Northern Hospital.

HAMILL, R. J., M.D., L.R.C.P. Edin., has been appointed Medical Officer to the Buckingham-palace-road Workhouse.

HEHNER, OTTO, has been appointed Analyst for the County of the Western Division of Sussex.

KELYNACK, T. W., M.B., Ch.B. (Vict.), late House Physician to the Manchester Royal Infirmary, has been appointed Assistant Medical Officer to the Manchester Receiving and Casual Wards, and to the Crumpsall Workhouse.

KING, H. W., M.D. Edin., M.R.C.S., has been appointed an Honorary Physician to the Chester Infirmary.

NISBET, F. J., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to Guy's Hospital.

OAKLEY, A. R. H., L.R.C.P., L.R.C.S. Edin., has been appointed Medical Officer for the A District, St. George's, Hanover-square.

PAGET, P., L.R.C.P., M.R.C.S., has been appointed Assistant House Surgeon to Guy's Hospital.

REVELL, GEO. TOMS, L.R.C.P. Edin., M.R.C.S., has been appointed Medical Officer for the Buckland District of the Tavistock Union.

SCURFIELD, HAROLD, M.D. Edin., has been appointed Surgeon to the Sunderland Post-office, vice W. H. Dixon, deceased.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement.

BIRMINGHAM CITY ASYLUM.—Clinical Assistant. Board, lodging, and washing. No salary.

COUNTY PALATINE OF LANCASTER.—Medical Officer of Health for the Administrative County of Lancaster. Salary £800 per annum, with a reasonable allowance for travelling expenses.

GENERAL INFIRMARY at Gloucester, and the GLOUCESTERSHIRE EYE INSTITUTION.—Assistant Physician.

JESSOP HOSPITAL FOR WOMEN, Sheffield.—House Surgeon. Salary £50 per annum, with board, lodging, and washing.

KENSINGTON DISPENSARY.—Honorary Medical Officer. (Apply to Hon. Sec., F. Leach, Esq., 7, Stanford-road, Kensington-court.)

MORPETH DISPENSARY.—House Surgeon. Salary £120, with furnished house, coal, and gas.

ROYAL BERKS HOSPITAL.—Assistant House Surgeon. Salary £40 per annum, with board and lodging.

ST. GEORGE'S AND ST JAMES'S DISPENSARY, 60, King-street, Regent-street, W.—Physician. Also Surgeon.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, Leicester-square, London, W.C.—Dispenser.

TRURO UNION.—Medical Officer and Public Vaccinator. Salary £25 per annum, exclusive of the fees as allowed by the Local Government Board.

TRURO UNION (Rural Sanitary Authority).—Medical Officer of Health for the Eastern District. Salary £45 per annum, which will include all travelling and other expenses.

WALLASEY DISPENSARY.—Assistant or Junior House Surgeon. Salary £80 per annum, with furnished apartments, coal, gas, and attendance.

WEST RIDING ASYLUM, Wadsley, near Sheffield.—Pathologist, and also required as fourth Assistant Medical Officer. Salary £100 per annum, rising £10 a year up to £150, with board &c.

Births, Marriages, and Deaths.

BIRTHS.

BUSHELL.—On Jan. 2nd, at Peking, North China, the wife of Dr. S. W. Bushell, Physician to H.B.M.'s Legation, of a daughter.

DODD.—On March 1st, at 14, Goldstone Villas, West Brighton, the wife of Arthur H. Dodd, L.R.C.P., M.R.C.S., of a son.

FLECK.—On Feb. 26th, at High-street, High Wycombe, the wife of William Fleck, M.D., of a son.

GIDLEY-DERRY.—On Feb. 24th, at Bodmin, the wife of B. Gidley-Derry, M.R.C.S., of a daughter.

SCHOFIELD.—On Feb. 27th, at Camberwell House, Camberwell, S.E., the wife of Frank Schofield, M.D., of a son.

MARRIAGES.

GODFREY—ROE.—On March 4th, at St. Michael's, Bournemouth, by the Rev. Prebendary Henry Roe, of Yeovilton, Somerset, uncle of the bride, and the Rev. F. E. Joyne, Vicar, Albert Edward Godfrey, M.B. Lond., son of John Godfrey, Northampton, to Annie Katharine, daughter of George Roe, Poyntington, Bournemouth.

GRANT—FRITH.—On Jan. 16th, at St. Stephen's, Wandsworth, J. Dundas Grant, M.A., M.D., of 17, Finsbury-square, to Helen, daughter of the late Edward Frith, Esq., of West Hill, Putney.

SMITH—PHILIP.—On Dec. 19th, at H.B.M. Consulate, and afterwards at the Native Church of the London Mission, Tientsin, North China, George Purves Smith, M.B. & C.M. Edin., to Jessie Philip, eldest daughter of the late Joseph King Philip, London.

WHITE—MAWBY.—On March 1st, at the Abbey Church, Bourne, William Robert White, M.D., of Belmont, Wadhurst, to Margaret Ellen, daughter of Thos. T. Mawby, The Cedars, Bourne.

DEATHS.

BERRY.—On March 3rd, at Appleton Cottage, Wigan, Elizabeth Ellen, the beloved wife of Wm. Berry, F.R.C.S.I.

CRAIG.—On Feb. 28th, at Lower High-street, Wednesbury, Arthur Richard T. Craig, L.K.Q.C.P., L.R.C.S. Irel.

DAVIES.—On Feb. 26th, at Arkwright-street, Nottingham, John Davies, M.B., C.M. Edin.

HENNESSY.—On Feb. 26th, at Lucknow, Surgeon Frank William Hennessy, M.B., C.M., of the British Medical service, second son of James Hennessy, of Maldah and Lancaster-gate, in his 27th year.

KISCH.—On March 3rd, at Randolph-road, Maida-hill, after twenty-four hours' illness, Joseph Kisch, M.R.C.S., in his 84th year.

LEWIS.—On Feb. 25th, at his residence, Penarth, Glamorganshire, Dr. James Lewis, late of Maestig, Glamorganshire, and of Oxford, aged 73.

OSWIN.—On March 3rd, at Cranecroft, Hawkhurst, Charles Oswin, M.R.C.S., L.S.A. Lond., formerly of Harley-street, Cavendish-square, and Woodhall Farm, Madison, U.S., Surgeon-Major in the United States Service during the American War, aged 88.

WELD.—On March 5th, at Wharton-road, West Kensington Park, William Walter Weld, Staff Surgeon-Major, H.P., late 47th and 49th Regiments.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, March 10.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, daily at 10 A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.
ST. MARK'S HOSPITAL.—Operations, 2.30 P.M.; Tuesday, 2.30 P.M.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour.
UNIVERSITY COLLEGE HOSPITAL.—Ear and Throat Department, 9 A.M.; Thursday, 9 A.M.
THE THROAT HOSPITAL (Golden-square, W.).—5.30 P.M. Dr. James W. Bond: Adenoid Growths in the Naso-pharynx.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Samuel West: Paroxysmal Hurry of the Heart.—Mr. Barwell: Treatment of Lateral Curvature of the Spine by Rachilysis.

Tuesday, March 11.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.; Fridays and Saturdays at the same hour.
GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at same hour. Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. G. J. Romanes: The Post-Darwinian Period.
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Newton Pitt: Cerebral Lesions. (Gulstonian Lecture.)
SOCIETY OF ARTS.—8 P.M. Mr. James Orrock: The Claims of the British School of Painting to a Thorough Representation in the National Gallery. (Pictures will be exhibited by Mr. Orrock.)
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Sir Henry Thompson: Analysis of 964 cases of Operation for Calculus in the Bladder by Lithotomy and Lithotrity, with Remarks. (The Calculi removed will be exhibited to the Society when the paper is read.)

Wednesday, March 12.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M. Operations by the Obstetric Physicians on Thursdays at 2 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.
LONDON HOSPITAL.—Operations, 2 P.M. Thursday & Saturday, same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.
CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical Visits on Wednesday and Saturday at 9.15 A.M.
THE THROAT HOSPITAL (Golden-square, W.).—5.30 P.M. Mr. T. Mark Hovell: Some Affections of the Middle Ear.
EPIDEMIOLOGICAL SOCIETY OF LONDON.—8 P.M. Mr. J. B. Curgenven. On the use of the Oil of Eucalyptus Globulus in Infectious Diseases.
HUNTERIAN SOCIETY.—8 P.M. Pathological Evening. Dr. Turner: A Specimen of Gumma in the Heart.—Mr. Cotman: Kidneys from a case of Puerperal Eclampsia.—Mr. Bidwell: (1) Sebaceous Cyst of Umbilicus; (2) Tubercle of Thyroid.—Mr. Tatham: Carcinoma of Liver.—Dr. Hingston Fox: Large Gall-stones producing Fatal Obstruction of Bowel. And other Specimens.
SOCIETY OF ARTS.—8 P.M. Sir Douglas Galton: The Chemin de Fer Glissant, or Sliding Railway.
BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Council at 8 P.M. Dr. R. T. Smith and Mr. Mayo Robson: Pelvic Abscess.

Thursday, March 13.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Ear and Throat Department, 9 A.M.
ROYAL INSTITUTION.—3 P.M. Mr. F. Niecks: The Early Developments of the Forms of Instrumental Music. (With Musical Illustrations.)
CITY OF LONDON HOSPITAL FOR DISEASES OF THE CHEST, VICTORIA-PARK, E.—4.30 P.M. Sir Hugh Beevor: The Diagnosis of Phthisis in its Earliest Stage.
ROYAL COLLEGE OF PHYSICIANS.—5 P.M. Dr. Newton Pitt: Cerebral Lesions. (Gulstonian Lecture.)
SOCIETY OF ARTS.—5 P.M. Mr. W. R. Robertson: Agriculture and the State in India.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Patients and Card Specimens at 8 P.M. Dr. Berry: (1) Demonstration of a New Stereoscopic Phenomenon, and the possible Clinical Uses to which it might be put; (2) Case of Spontaneous Purulent Hyalitis occurring long after Cataract Extraction; (3) Note on the Metre-angle in Latent and Manifest Muscular Deviations; (4) On the Immediate and Remote Effects of Tenotomy on the Concomitancy of a Squint.—Mr. Spencer Watson: Case of Glaucoma.—Mr. Marcus Gunn: Case of Superficial Punctate Keratitis.

Friday, March 14.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
THE CANCER HOSPITAL (FREE), FULHAM-ROAD, BROMPTON, S.W.—4 P.M. Mr. Elam: Cancer of the Uterus.
CLINICAL SOCIETY OF LONDON.—8.30 P.M. Living Specimens at 8 P.M.; Papers at 9 P.M. Dr. Savill: A case of Abductor Paresis of the Vocal Cords.—Mr. Knowsley Thornton: Abdominal Nephrectomy for large Sarcoma of Capsule or Supra-renal Capsule; Recovery.—Mr. Croft: Rupture of Small Intestine without External Wound, Laparotomy Excision of Injured Bowel, Enterorraphy; Cure.—Mr. H. W. Allingham: Obscure case of Acute Abdominal Obstruction in a Boy aged ten, Laparotomy, Removal of Suppurating Appendix Vermiformis; Recovery.
ROYAL INSTITUTION.—9 P.M. Prof. T. E. Thorpe: The Glow of Phosphorus.

Saturday, March 15.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; and Skin Department, 9.15 A.M.
ROYAL INSTITUTION.—3 P.M. Lord Rayleigh: Electricity and Magnetism.
SOCIETY OF ARTS.—3 P.M. Prof. Vivian Lewes: The Atmosphere.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, March 6th, 1890.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp.	Rainfall.	Remarks at 8.30 A.M.
Feb. 28	30·42	N.E.	32	..	74	40	29	..	Hazy
Mar. 1	30·06	W.	31	..	46	37	29	..	Overcast
,, 2	30·18	N.E.	31	..	65	32	26	·18	Cloudy
,, 3	30·49	N.E.	25	..	67	34	23	..	Overcast
,, 4	30·44	N.W.	24	..	54	41	22	..	Foggy
,, 5	29·87	N.W.	41	38	70	47	30	·07	Cloudy
,, 6	29·78	W.	47	45	60	54	40	..	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

We cannot undertake to return MSS. not used.

VACCINATION GRANTS.

To the Editors of THE LANCET.

SIRS,—Your correspondent who has been inquiring how it is that no vaccination grant has been paid for some time past may derive a little consolation from the fact that no public vaccinator has received any grant since the passing of the Local Government Act, by which the payment of the grant devolves upon the County Council. It is probable that at the end of the present financial year (March 31st) the Local Government Board will make an order upon each County Council to pay the vaccination grant to those recommended to receive it; if not, I fear the grant will be a thing of the past, as will also be public vaccination should the compulsory clauses of the present Vaccination Acts be abolished.

I am, Sirs, yours obediently,
March 5th, 1890. M.D.

F. A. B.—We are not aware of any Canadian university which will admit a doubly qualified man to its final examination for M.D. without residence.

Mr. Humphreys.—The paper has been received.

HOME FOR THE DEAF AND DUMB.

To the Editors of THE LANCET.

SIRS,—Would you permit me, through your columns, to ask if any brother practitioner could recommend me any home or asylum where a poor boy who is dumb and nearly deaf could be admitted in order that he may be taught a trade. The parents can only afford to pay a small sum per week. I am, Sirs, your obedient Servant,

Chippenham House, Monmouth. T. G. PROSSER.

THE EVILS OF MEDICAL AID SOCIETIES.

To the Editors of THE LANCET.

SIRS,—As there has been of late much correspondence and many suggestions about medical aid societies, I desire to put forward a few views of the matter.

In the first place, I think it is pretty well agreed that these societies do a great amount of harm to the general practitioner, for which I cannot help thinking the general practitioners have themselves to thank. Many of these societies are fostered by people in affluent circumstances under the guise of philanthropy, whereas in reality they do so not from love of the masses, but simply to curry favour with them; and so long as the populace can get medical treatment for 1*d.* a week they are not likely to be slow in taking advantage of it. We find a great many of the wage-earning classes who join them saying they cannot afford to pay a doctor a moderate fee when they require professional treatment; but a great many of these people can always afford to patronise football matches, excursions, and numberless other entertainments, while some who cannot afford a doctor can always find money to bet with, and the female portion to spend money in finery and other extravagancies. Many a man who undertakes this medical aid duty has to work very hard, and not gain as good a remuneration as many of the people at whose beck and call he is. There are hospitals and infirmaries all over the country, with provident clubs, for the benefit of the poor, and for the benefit of the very poor there is the parish doctor. Now, if practitioners would set themselves against undertaking things of this kind, and charge the populace a moderate fee, I am inclined to think matters would be more rosy. Again, there are a great many doctors who start private medical aid clubs of their own; not because they so love the masses as to labour for their benefit, but, in many cases, to keep some brother practitioner from acquiring practice or patients. One does it; others follow suit. And how often do we find club practice cut like shopkeeping business, simply because one man is afraid some professional brother should do a little more? We cannot all aspire to be leading lights in the profession; but that is no reason why, if we do like our profession, we should pursue it on a degradingly low scale of remuneration. At the present time it cannot be said wages are low, or that there is any lack of skilled medical practitioners. Do any other professions consider their services worth 1*d.* per week? Is not the medical profession as noble and self-denying a one as the law, the Church, the services, engineering, &c.? When those who pursue the penny-a-week enterprise have a little more respect and esteem for themselves and their profession, they will not be looked down upon as a class who ought to receive a lower remuneration than the quack or patent nostrum man. There are many people among medical aiders who would not think a penny-a-week doctor good enough to invest 1*s.* 6*d.* or 2*s.* with for medicine, and yet who would, and do, joyfully pay 2*s.* 6*d.* or more for some patent nostrum, in many cases of not the least use to them. And why? Because they think they cannot have a good thing for a ridiculous sum. Many people who join these medical aid societies do so because they are too greedy to pay a medical man, and the profession are soft enough to encourage it.

I must apologise for using plain words and somewhat unpalatable statements, and, although attaching importance to remuneration, do not lose sight of professional status.

I am, Sirs, yours truly,

Jan. 26th, 1890. G. P.

Enquirer.—A practitioner undertaking to attend a lady in her confinement does not necessarily engage to do so without assistance or consultation, or in every emergency that may arise. Without knowing more of the particulars, we cannot give an opinion in more detail; but we do not think the less of a practitioner, in unusually difficult circumstances, for asking for skilled help. Rather would we say that in every case of instrumental midwifery, where practicable, two sets of hands are desirable. Many a perineum has been saved in forceps cases that would otherwise have been badly torn.

Guardians' Justice.—It is difficult to advise our correspondent. The guardians are probably within their rights. We quite appreciate our correspondent's desire not to compete against his aged friend.

"*Parsons*" has not enclosed his card.

EXCISION FOR PROLAPSE OF RECTUM.

To the Editors of THE LANCET.

SIRS,—In the concluding paragraph of Mr. Treves' excellent paper in your last issue the following statement is to be found: "And the risk of a subsequent stricture can hardly be said to exist." Did I not believe that the author cares more for the advancement of surgery than for the views of any surgeon or body of surgeons, I should not desire to encroach on your space to point out that which must be obvious. My own experience of excisions of varying portions of the rectum for malignant disease has taught me that stricture rapidly follows. And I also know that it follows excision for prolapse; for not long since a case was in hospital in which the lower portion of the rectum had been excised for prolapse at another institution, and the patient applied for relief of the resulting stricture. Mr. Treves' second case has recently applied at the hospital, complaining of incontinence of fæces and local and lumbar pain; and on examination, a long stricture, which admits the oiled index with difficulty and pain, is too easily manifest, and there are two or three smaller annular constrictions in its course. I have advised the patient to see Mr. Treves as soon as possible.

The object of this note is to put before practical surgeons the following questions:—Given a severe case of prolapse, is it better for the patient to undergo a serious operation, which will certainly substitute a troublesome stricture for a more manageable malady? Is it not better to try, and to repeat if necessary, deep longitudinal burning, or even to wear a prolapse truss? The gravity of the operation of excision in cases of complete prolapse would not weigh with me if we could promise cure without subsequent trouble; but as this cannot be, I should prefer to tell the patient all the consequences, and to recommend other modes of operating, or the wearing of a truss.

I congratulate Mr. Treves on his operative success, and on his admirable paper, and wish, for the sake of surgery, I could add that there is no risk of stricture following excision.

I am, Sirs, yours truly,

March, 1890. HOSPITAL SURGEON.

Kentigern.—According to the "Formulaire Pratique" of Dujardin-Beaumetz, the following is the composition of the preparation mentioned:—Hypophosphite of lime, 1 part; distilled water, 30 parts; white sugar, 64 parts; lime water, 6 parts. It is directed to be dissolved at a gentle heat and filtered. It is of less strength than the syrupus calcii hypophosphitis recently recommended at the British Pharmaceutical Conference. We have no means of knowing the opinions of those named by our correspondent upon the preparation.

Scotia might apply to Messrs. Moore and Co., 125, Houndsditch.

IMMEDIATE TORSION OF TEETH.

To the Editors of THE LANCET.

SIRS,—The above operation was performed on me about thirty-two years ago by the late Frank L'Estrange of Dublin. The tooth in my case was the left central incisor, and the operation was performed at one sitting. As I did not get anything to relieve the pain, I may say that all the details of the operation were forcibly impressed on my mind. After the torsion was effected, the tooth was kept in position by either silk or wire wound round it and round those on each side, and the rest of the treatment consisted in applying lint soaked in a lotion containing laudanum and tincture of myrrh to the gum. At the end of about a month the tooth was as firm as any of the others, and has remained so ever since. My impression is that Mr. L'Estrange tried immediate torsion then, as an experiment, in preference to taking out the tooth and replacing it. The amount of force necessary was, I remember, very great, even in the hands of such a strong man and skilful operator.—I am, Sirs, yours truly,

GEORGE H. ORMSBY, M.K.Q.C.P.I., &c.

Shaldburn, March 3rd, 1890.

THE PASTEUR METHOD.

To the Editors of THE LANCET.

SIRS,—I have just returned from Paris, where I have been spending some weeks paying special attention to M. Pasteur's method of treating persons who have been bitten by rabid animals. Among the patients whom I saw attending the Pasteur Institute was an Englishman, an officer in a cavalry regiment stationed in India, who had been bitten by a rabid dog in India while out there with his regiment at his usual duties. He made immediate arrangements for leaving for Paris, and he lost no time in reaching Paris. He arrived there, and treatment was begun at the Institut Pasteur twenty-three days after the bite.

May I ask (1) whether there is, or is not, in India, any institute for treating persons bitten by rabid animals, according to the Pasteur method? (2) and if not, whether a person bitten by a rabid animal in India is compelled to spend twenty-three days at least to reach the nearest treatment? and (3) if there is no Pasteur Institute in India, why is that so?

I am, Sirs, yours very truly,

Feb. 21st, 1890. F. J. S.

LEPROSY IN ENGLAND IN 1307.

To the Editors of THE LANCET.

SIRS,—Thomas Button, Bishop of Exeter, whose will was proved Sept. 21st, 1307, left over 200 legacies. Of this number thirty-nine were for the benefit of lepers lodged at the following places in his diocese:—

"Exeter, Okehampton, Tavistock, Sutton, Plymptone, Cleve, Modburi, Chadelyntone, Dertermuth, Tottene, Honiton, Teignemuth, Nijweston-Ferrers, Toppesham, Deveneburi, Barnum and Pylton, Lanceton, Tremeton, Sctus. Germanus, Lis Kyret, Dyn-mur, Bodmin, Lanford, Tony, Ponsmur, Schiep-stalle, Resureghy, Coygon, Truru, Argel, Helleston, Glas, Mousehole, Madern, S. Sancred, Redruth, S. Brioc, Oldestowe, Medeschele."

I copied this from the will, and send it, believing that at the present time it may be of interest.

I am, Sirs, very truly yours,

February, 1890. T. C. BUTTON.

A CORRECTION.

To the Editors of THE LANCET.

SIRS,—Kindly allow me to point out that in my clinical lecture on Extra-uterine Gestation, which appears in THE LANCET of to-day, by a printer's error the age of the patient in Case 3 is given as fifty-eight, instead of *thirty-eight*.

I am, Sirs, yours faithfully,

Harley-street, W., March 1st, 1890. WILLIAM DUNCAN.

NOTICE TO MEDICAL MEN.

To the Editors of THE LANCET.

SIRS,—Perhaps you may be able to find space for the following in your valuable journal.

A man giving the name of Thos. Lawrence, no address, was convicted and sentenced to three months' imprisonment at Greenwich on Feb. 25th for stealing from doctors' consulting-rooms. It is simply the old story. A man calls between consulting hours to find out what time the doctor can be consulted by a brother or friend. The object of the present letter is to state that the police have still unidentified property in their hands—knives, umbrellas, &c. Lawrence is a young man about twenty, curly hair, medium height, blue eyes, wearing a dark overcoat.

I am, Sirs, yours obediently,

March, 1890. ONE OF THE VICTIMS.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Poore, London; Dr. Gowers, London; Dr. Buzzard, London; Mr. Bland Sutton, London; Dr. W. Duncan; Dr. Seaton, London; Mr. Alban Doran, London; Dr. Bronner, Bradford; Mr. Maycock, Leamington; Mr. Cotes, Bournemouth; Dr. Stephen, London; Messrs. Macmillan and Co., London; Mr. Trommsdorff, Germany; Messrs. Arnold and Sons, London; Mr. Gurner, Pall Mall East; Messrs. Merryweather and Sons, London; Dr. Prosser, Birmingham; Mr. O'Conor, Stony Stratford; Mr. Smith, Greenwich; Dr. Latis, Italy; Dr. G. Belben Flux, Highworth; Mr. Martindale, London; Mr. Frost, London; Mr. Goodchild, Plaistow; Dr. Murrell, London; Mr. Brunett, Liverpool; Dr. Dix, Southampton; Miss Rickman, Yorks; Mr. Barnett, Brighton; Dr. Cotter, Cork; Mr. Denton, Yorks; Mr. Lindsay, Belfast; Dr. Amasde, Paris; Mr. Colson, Jersey; Mr. Downing, Earlswood Asylum; Mr. Foulerton, Chatham; Dr. McLean, Otago; Dr. Fletcher Beach, Dartford; Dr. Alex. Miles, Edinburgh; Messrs. Reynolds and Branson, Leeds; Mr. Lowndes, Liverpool; Mr. F. W. Gibbon, South Shields; Mr. Harrold, London; Mr. F. R. Humphreys; Mr. Chauncy Puzey, Liverpool; Dr. W. E. Fletcher, Ormskirk; Dr. R. Hingston Fox, Finsbury-square; Mr. F. Dalton, Rottingdean; Dr. W. Scott Lang, Edinburgh; Dr. F. H. Edgeworth, Bristol; Mr. S. Mellor, West Malling; Mr. S. G. Street, London; Dr. D. Hood, London; Dr. Frank M. Pope, Leicester; Mr. T. Feldmann; Dr. Maxwell; Dr. W. Hunter, Cambridge; Dr. D. Mackintosh, London; Mr. G. C. Wilkin; Dr. J. W. Fraser, Hull; Dr. Sinclair, London; Mr. Abbott, Braintree; Mr. E. C. Aspinall, Ooshooia; Dr. Littlejohn, Edinburgh; Dr. Lediard, Carlisle; Mr. Atkinson, London; Mr. Humphreys, London; Mr. Cornish, Manchester; Dr. Lovegrove, Hythe; Dr. Ker, Birmingham; Mr. Ronald, Lincoln's-inn; Mr. Rauschke, Leeds; Mr. Grant, Dundee; Mr. Quarry Silcock, London; Mr. Longman, Salisbury; Messrs. W. H. Smith and Co., London; Mr. A. E. Pepper, Folkestone; Messrs. Maythorn and Son, Biggleswade; Mr. G. H. Ormsby, Slaidburn; Messrs. Blondeau et Cie., London; Dr. C. E. Sheppard, London; Messrs. Burroughs and Wellcome, London; Dr. P. S. Abraham, London; Messrs. Hill and Co., London; Mr. Norton, London; Dr. Scriven, Derby; Mr. Stanmore Bishop, Manchester; Mr. Hornibrook, Bloomsbury; Messrs. Lee and Martin, Birmingham; Mr. Hartridge, London; Dr. Jay, Bath; Mr. L. Browne, London; Mr. Scott, Manchester; Mr. Homan, Salisbury; Mr. Waite, Leicester; Mr. Shera, Harrogate; Mr. Howe, Stoke-on-Trent; Mr. Bourchier, Brighton; Mr. Lewis, London; Mr. Truscott, Truro; Mr. Godfrey, Bournemouth; Miss Homan, Acton; Dr. Redfern, Croydon; D. P. M. Braidwood, Bristol; Dr. Prosser James, London; Mr. Prosser, Monmouth; British Syphon Co.; Secretary, Jessop Hospital, Sheffield; M. G., Dalston; J. M. S., Alden; Secretary, Bury Dispensary Hospital; Parsons; Kentigern; Smedley's Hydropathic Establishment, Matlock; W. H. B.; Hospital Surgeon; A Veteran Examinee; Infection; F. A. B.; Enquirer; Secretary, Gloucester General Infirmary; Secretary, St. John's Hospital for Diseases of the Skin, Leicester-square; Guardians' Justice; Secretary, Royal Berks Hospital; Secretary, General Hospital, Notts; Secretary, German Hospital; X. Y., London; Forceps, Liverpool; Secretary, Clayton Hospital, Wakefield; Delta, Newcastle; Potiphar, Chester; An Old Labourer; Primus, London; Harold, London; Scotia.

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NEWSPAPERS.—*Glasgow Evening News, Leeds Mercury, Scottish Pleader, Folkestone News, Truth, Bristol Mercury, Nottingham Express, Broad Arrow, Moniteur Universal (Paris), Zoophilist, Christian Mirror, Kilkenny Journal, Sunday Times, Chemist and Druggist, Liverpool Daily Post, Builder, Sheffield Daily Telegraph, Reading Mercury, Metropolitan, West Middlesex Standard, Surrey Advertiser, Weekly Free Press and Aberdeen Herald, City Press, Hertfordshire Mercury, New York Herald (London), Answers, Public Opinion, Echo (Georgetown, Demerara), Daily Telegraph (Melbourne), Windsor and Eton Express, Freeman, Alliance News, St. Neots Advertiser, Richmond Herald, Temperance Record, Mining Journal, Glasgow Herald, Pullen's Kent Argus, Agricultural Economist, Umpire, Scottish Leader, Birmingham Post, Australian Medical Gazette, Canadian Practitioner*, &c., have been received.

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